DOCUMENT RESUME

ED 378 187 SP 035 712

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TITLE	Becoming Assessors: Authentic Assessment for Authentic Instruction. A Report of the Blue Ridge Assessment Project, a Collaborative Effort of the Albemarle, Fluvanna, Greene, Harrisonburg, Orange, and Rockingham Schools.
INSTITUTION	Albemarle County Schools, Charlottesville, Va.
SPONS AGENCY	Virginia State Dept. of Education, Richmond.
PUB DATE	Jun 94
NOTE	435p.; Portions of section 4 (resources) contain illegible print.
AVAILABLE FROM	Frank Morgan, Curriculum Development and Research, Albemarle County Schools, 401 McIntire Rd., Charlottesville, VA 22901.
PUB TYPE	Guides - Non-Classroom Use (055)
EDRS PRICE	MF01/PC18 Plus Postage.
DESCRIPTORS	Check Lists; Elementary Education; *Evaluation Methods; Inservice Teacher Education; Performance Tests; *Portfolio Assessment; Simulation; Skill Analysis; *Student Evaluation; Student Projects; *Test Construction
IDENTIFIERS	*Authentic Assessment; Virginia

ABSTRACT

This report describes educators' collaborative self-directed experiences in learning about and producing alternative forms of assessment for use in elementary-level classrooms. The report analyzes the Virginia Standards of Learning and local curricula in English/Language Arts, Mathematics, Social Studies, and Science/Health in grades 2-4, to provide common ground for the assessments. The assessments themselves are then presented, including checklists, portfolios, performance tasks, product assessments, projects, and simulations. Assessments in language arts cover oral communication, research and reporting skills, reading, writing, letter writing, and creative writing. Assessments in mathematics focus on problem solving, probability and statistics, data analysis, conservation, patterns, economics, money, measurement, geometry, and graphing. Social studies assessments address economics, earth care, Powhatan Indians, Tidewater region, and cooperative learning. Science/health assessments examine investigative skills and observation skills. A section titled "Voices" seasons the report with teachers' statements about learning and individual change in their professional contexts and their lives. Another section offers recommendations to enhance teacher learning and change. A resources section presents a glossary, and items for use as overhead transparencies or handouts. Appendices include a project plan, assessment item checklist, a model of the purposes of assessment, and a participant list. Contains 55 references. (JDD)

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Becoming Assessors

Authentic Assessment for Authentic Instruction

A Report of the

Blue Ridge Assessment Project
A collaborative effort of the Albemarle,
Fluvanna, Greene, Harrisonburg, Orange, and
Rockingham Schools

Dr. Diane Foucar-Szocki, Director

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Becoming Assessors

Authentic Assessment for Authentic Instruction

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Acknowledgements

"For we are, actually, pioneers trying to find a new path through the maze of tradition, convention and dogma. Our efforts are part of a struggle to mature...every advance in understanding has value. Every step, even a tentative one, counts."

- Anne Morrow Lindbergh
Gift From the Sea

Our work together through this project year was both intense and exciting. Moments of great stress and anxiety were interspersed with glimpses of excitement and opportunity. We came together as strangers. We depart as friends and colleagues who together created the paradox of a common experience unique to each of us. We are ultimately indebted to one another. Moreover, we acknowledge those who assisted us in our efforts. Specifically, we thank Laurie McCullough and Linda Bradley for the vision that created our consortium. We thank the Virginia Department of Education for funding our work and Marcia Perry and Susan Frierson for their guidance. We thank our Steering Committee, especially Frank Morgan, Linda Bradley, Linda Bland, Alexis Smith, Joanne Reina, Alan Yost, Dee Anderson, Nancy Mast, and Sarah Scott for their continual involvement and support. Chuck Watson provided thoughtful reflection on our work through observations, interviews and conversations. His editing and writing enhanced this final product. We are deeply indebted to Bonnie McDorman for her patience and persistence in supporting our work and typing this manuscript. Finally, we recognize the contributions and sacrifices made by our colleagues, students, and families as we pursued this learning - learning which we believe will ultimately benefit us all.

- The Blue Ridge Assessment Project Team
Diane Foucar-Szocki, Ed. D.
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June 1994

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Our Year

by Diane Foucar-Szocki, Chuck Watson, Paula White

INTRODUCTION

This report provides multiple perspectives on our year-long efforts to learn about and produce alternative forms of assessment for use in K-3 classrooms. It highlights what helped and hindered our work. We do not strictly outline how others ought to learn about alternative forms of assessment, but rather we recount our collective experiences. We hope to share central tenets regarding successful teacher-learning based on our experience and academic research and theory.

The full report includes materials we found useful: a curriculum analysis, comparing the Virginia SOL's with the participating school divisions curriculum, our assessments, a glossary of terms, a bibliography, and selected overheads and handouts.

The report visits the ideas of teacher learning, assessment design and development, collaboration, and the change process. This portion of the report traces the collaborative efforts of six school divisions represented by 24 teachers working together from July 1993 through June 1994. More than a chronological, step by step reconstruction, the report depicts the flavor of our largely collaborative self-directed learning. The following section, "Voices," seasons the report with teachers' voices and statements about learning and individual change in their professional contexts and their lives.

Perhaps the most important goal for this report is kindling in the reader an interest in teacher-learning as a process. Like other recent process-oriented models of staff development, we've tried not to provide a recipe but rather to detail the necessary ingredients and their potential uses.

ALTERNATIVE FORMS OF ASSESSMENT

To bring about change we must see the need for something to be different. Recent interest in alternative forms of assessment rises from a recognition that how we currently measure learning is narrow and inadequate for a changing world.

> *"Most members of the project would agree that becoming assessors is as ongoing as assessment itself. We spent much time getting the meaning of the language clear, paying close attention to such terms as standards, expectations, criteria, rubric, "look-fors," and outcomes. We looked at a variety of purposes for assessing and focused on how that affected our assessments. We quickly learned how multi-faceted our work had to be for reliability and validity." (Teacher)*

During a meeting in late, 1993, we engaged in a brainstorming session about assessment in general. Our collective responses led to the following statements.

What is assessment?

Assessment is tied to instruction, places a learner on a continuum, helps in terms of planning for instruction, results in data collection and is on-going.

What do we know about authentic assessment?

We know authentic assessment occurs within the context of the classroom, forms a bridge to the real-world, is dynamic and real life.

What are some characteristics of authentic assessments?

Authentic assessments are learner centered and real life, provide a show case for learners to show what they know and can do, are fun and motivating, allow us to look objectively at meaningful performances and products, result in individualized learning, deal with the whole child, and are rich in design and open ended in nature. Outcomes, look-fors (criteria), standards, scoring scales correlate. Authentic assessments pertain to essential knowledge and skills that one needs for real life. Authentic assessments are often interactive.

How do you create an environment for authentic assessment?

The classroom environment must change. The environment must be one in which authentic instruction takes place. Teachers must be willing to take risks, face change and be reflective.

TEACHER LEARNING

The long-used traditional forms of staff development assume learners are deficient in a particular area of performance. This approach leads often to a prescribed treatment and remedy equally administered to all (Drennon, 1993.) The staff development approach used in this project sought to disconnect itself from this paradigm.

Our work here was both staff development and research. We were charged initially with developing assessments for potential use at the third grade level throughout the Commonwealth. When Virginia moved away from the "Common Core" model, we chose to focus on the process of developing alternative forms of assessment for classroom use. Within this focus, we attempted to use an inquiry model (Drennon, 1993; Lytle, 1991) for learning about and producing alternative forms of assessments for K-3 classrooms. We found four key activities critical to our becoming assessors: reading, thinking, doing, and talking.

> *And talking, and talking! Talking, or sharing professional views, became the most important part of the process. Some of our talk incorporated the whole group, but often some groups would break off, for one reason or another, and discuss, debate, argue, or "zing" ideas at each other in a attempt to make some meaning out of all the information coming in. Many discussions have gone on about expectations, management, reliability, validity, and rubrics. We have read mountains of articles (are there any mountains left with trees, or only mountains of paper?) on all different aspects of assessments. (Teacher)*

"Reading" included four basic texts that were shared by all: *A Practical Guide to Alternative Assessment* (Herman, Aschbacher, and Winters, 1992), *Moving Toward a Moving Target* (Appalachian Educational Lab, 1993), *Developmentally Appropriate Practice* (Bredekamp, 1993), and *Reaching*

Potentials: Appropriate Curriculum and Assessment for Young Children (Bredekamp and Rosegrant, 1993). Throughout the project we read and discussed nearly 100 articles found largely by the participants from a variety of journals and media from Time to Educational Leadership.

"Thinking" included gathering information on the tasks of developing and using assessments, studying that information and planning how to use that information to build assessments. "Doing" included developing assessments for classroom use, using those assessments in the classroom, gathering and giving feedback, and revising.

These were not mutually exclusive activities; reflecting, talking and listening were continual throughout our work. Teachers worked in pairs, as team members and as a total group, giving and receiving feedback. Participants differed in the amount and ways in which they were engaged, depending upon opportunity, experience, attitude, expectations, and disposition.

THE UNIVERSITY COURSE

Twenty of the twenty-four project participants took a summer university course in alternative assessment prior to the beginning of the project. This more traditional form of staff development, while worthwhile as an introduction, set some people on a course that they later found to be inadequate.

Ruth Mitchell's Testing for Learning was the textbook. Developing a curriculum "unit" was central to the course. By directing their efforts on the unit, participants focused on developing activities **without** clearly articulating why learners were to study these things, what the learners were to learn, how the teachers would know if the students had learned and could use their knowledge, and why these were important things to know. Therefore, when the notion of assessment forced teachers to analyze these issues, the units often fell apart. This caused much confusion among the teachers who have historically organized instruction around topical, but often arbitrary, fact-centered activities. As the assessment issues and formats became more clear, their traditional units became less so, causing many challenges and frustrations. In addition, new terminology and conflicting jargon among the presenters and the participants appeared to keep the level of dissonance and misunderstanding high throughout the course. Exacerbating the situation was the fact that the teachers were in class most of the day and family and other demands often placed teachers in the uncomfortable situation of choosing between family and classwork.

THE WORKING TEAM

During the summer of 1993 the entire project team met for a two-day planning retreat. Together, the group crafted a project plan (attached as Appendix A) One of the main objectives of the retreat was to establish all of the participants as fully contributing members with the project director acting as a facilitator of the group's collective efforts. Enlisting teachers as knowledgeable practitioners and co-creators of new knowledge in the field was central to the success of our efforts.

Following the get-acquainted period we focused on what we already knew about alternative forms of assessment, what else we needed to know, what we ought to assess, and how we ought to work together. We then formed cross-divisional teams consisting of at least two school divisions, with each person focused on a self-chosen area of interest toward which an assessment would be developed. During the month between this meeting and the next meeting, participants were to develop an assessment that would be reviewed collectively. This initial team-building and professional dialogue appeared to be stimulating, difficult, yet rewarding.

> *"The two days were invigorating and draining at the same time"*
>
> *"I feel really good about the objective I've chosen. It's a new challenge which I look forward to. I see it as an ongoing series which could be assessed at different times during the day."*
>
> *"It's surprising that today was totally frustrating. I'm shocked after feeling so good after yesterday morning."*
>
> *"There's too little time to complete the project."*
>
> *"I've felt most engaged when we were discussing and deciding on individual outcomes."*
>
> *"It was affirming for me to be reminded that change doesn't happen easily."*
>
> *"The strengths coming out of our groups pleased me."*
>
> *"It helped me to discuss my project with my team and have the members give me ideas." (Teachers)*

REVIEW SESSION ONE: PROVIDING FEEDBACK

Our next meeting was an assessment review session within which project participants brought their draft assessments for feedback and review by colleagues and invited consultants with expertise in early childhood education and/or assessment. Using the draft checklist provided by the Department of Education (Appendix B) several concurrent small groups convened and focused on the work of one member. The groups were predetermined to provide a mix of experts, colleagues, school divisions and grade levels. Several groupings occurred throughout the day. The results of these efforts were fruitful and helpful with respect to the assessment development, but the process was painful and difficult.

> *"I appreciated the fact that other people are as stressed and uncertain as me and lacking in self confidence as me."*
>
> *"I was puzzled by the variety of opinions about the assessments."*
>
> *"I was a bit confused about the format to follow in the review sessions. We flip-flopped from discussion to writing and back to discussion. In one way this way helpful but it was difficult to write and concentrate during discussion."*

> *"I wasn't afraid to present, but I did get confused by the simultaneous input; however, the input was great and useful."* *(Teachers)*

MAKING SENSE BETWEEN MEETINGS

Between this meeting and the next whole group meeting a month later, participants attempted to make sense of what we had learned, what we knew or thought we knew, and where we should be going from here. Small regional meetings were held to reflect on and discuss our work. Within the context of these smaller meetings, participants began to question some of the assessment assumptions and definitions they previously thought solid and unquestionable. In some cases, the questions added clarity, and for others, the questions added more confusion. What had once seemed relatively clear and straightforward was becoming messy, vague, and divergent. Teachers were going in different directions and found themselves questioning one another and both state and national level "experts."

> *"I believe an interchange of ideas promotes growth and change even though it may be painful. It helps one to see a work from a new perspective. If we are to grow we must be willing to take the risk of failure."*
>
> *"The mental agony has been very stressful. I have never been at such a high level of stress as I have been this year."* *(Teachers)*

OUR FIRST EXHIBIT

It was necessary that the first group of assessments be reviewed by the Department of Education. Our attempts to be collaborative and participatory with them and with educators from a variety of fields, was difficult. Therefore our compromise was to hold an exhibition of our work up to this date and seek feedback in multiple ways. This exhibition served as an adequate demonstration of our work and helped us communicate with the State Department of Education, but fell well short of our goal of experiencing a mutually beneficial dialogue based in learning. We had expected to come to the exhibition as equals in the uncertain world of assessment, but many of the project participants felt that they weren't taken seriously.

> *"The critiques were less formal and more interactive"*
>
> *"The exhibition was designed like a science fair...."*
>
> *"The people from the state seemed to think that we were just "playing" with the notion of assessment, but they "knew" the answers. It was if they held the red pencils..."* *(Teachers)*

Additional frustrations were felt with respect to standards. The state checklist was found to be inadequate and incomplete. The participants already felt overwhelmed by the tasks and uncertainties surrounding the project, and the knowledge that the standards were inadequate added to participant stress. In addition, there was concern and tension among the teachers about the need to produce assessments (the "assignment" and "right answers") as documentation of our efforts and the significant learning that was taking place.

> *"I feel that much I have learned and my learning is validating previous experiences. I also feel that being able to describe and discuss what makes an assessment "good" is still difficult. We must continue to stretch ourselves to be able to establish and communicate standards. We must constantly question absolutes and be open to new ideas."*
>
> *"I feel really tired of all this and I was excited initially - it will be good to have a "break" until February." (Teachers)*

MULTIPLE PERSPECTIVES

Following our December meeting, the revised assessments were sent to Richmond for written feedback from state department officials. During the next month as the participants worked in their respective classrooms, the teachers further applied the principles of assessment and standards to their own practices. Indeed, written evaluation comments (near the end of the project) consistently indicate that during the project the participants began to not only examine their practices from a different view, but many long-held beliefs began to change as the teachers placed their daily work into the contexts of what was being learned and developed in the project.

> *"I put a lot more responsibility on my students. I expect them to solve problems and be self-motivated learners. I expect them to assess themselves and adjust accordingly. I listen to them a lot more. I make them aware of expectations and let them have input into the process of those expectations."*
>
> *"I tend to think of the outcomes I want before I begin the unit. This I think is the most important change I've made." (Teachers)*

MOVING ON

Meetings were now being designed largely in response to the needs of the participants, rather than to direct the participants. As such, the February meeting attempted to meet the needs of two increasingly distinct populations, those who still felt they did not understand what assessments were and needed additional information, guidance, instruction and organized practice, and a second much larger group who knew where they were and needed time to build their work and further establish their professional network through meaningful, focused interaction. Thus, the day was divided into individual work sessions and small group time where the differing needs could be met.

Information overload was no longer an issue. Participants wanted time to work and assimilate the information they had gathered, additional interaction with peers, examples of peer work, meetings closer to home, and opportunities to plan within their school divisions.

> *"Our focus shifted from seeing ourselves within our classrooms to*

> *seeing ourselves within a larger context".* *(Teacher)*

There was sufficient evidence to suggest that the majority of project participants had a working understanding of alternative forms of assessment. Teachers knew what they were going to do and were now knowingly building their assessments for larger purposes and audiences. We turned greater attention to the purposes of assessment from monitoring student progress in the classroom to purposes of accountability (Appendix C). This further crystallized our understanding.

It now became important to focus on our larger goal of becoming a cadre of professionals who could inform and influence practice at the school division level. In addition to creating a second assessment for submission to the Virginia Department of Education, participants made presentations at school division and regional meetings and two participants co-facilitated a graduate level course on alternative assessment in one of the school divisions. Several participants enrolled in this course. Other participants conducted in-services, observed in one another's classrooms and worked with local instructional curriculum support staff to revise and write curriculum and assessments, review reporting practices and procedures, and to plan future inservices.

> *"Since we'd had a respite from producing assessments I was able to look at myself and ask what was I doing, what were we doing, and demand, to know how it fit into the larger picture of teaching and learning both at the Division and State level." (Teacher)*

At this point the project director's role shifted from providing information and creating contexts for learning to supporting independent work. Her work shifted from developing a working group to building bridges between the work and the school divisions. She now focused on informing others and linking project participants with those who made decisions at the division level. If this work was to live on, it had to become a part of the division level plans for the upcoming academic year. As participants moved into these new roles with the support of the director, their perceptions and professional goals shifted as well.

> *"What I want to do next is support my group members in their development of assessments for use with the new math adoption."*
>
> *"What I would like to do is to meet with members of the county team to share ideas, get feedback and make plans for our overall goals."*
>
> *"I'm going to work on assessments for the language arts curriculum"*
>
> *" I hope to produce a useable language arts assessments for our school division, beginning with reading." (Teachers)*

OUR FINAL EXHIBITION

Our time together now focused on giving people time to work and deciding how we would share our work and what we had learned. While uncomfortable for some it became clear that we must make sense of this work for others and give it life.

> *"I like the idea of asking others to come and see our work. That is great!"*
>
> *"It was affirming to hear other teachers state how important our work is."*
>
> *"In the morning when I heard others talk it told me I'm not alone, that were all busy and that this is difficult."*
>
> *"I was surprised that I had trouble figuring out 'look fors' for my reading/writing outcomes!! Look fors, outcomes, standards -- can it be that I still get confused by the terms?!!!"*
>
> *"What surprised me the most was that I could feel so confused again, like I did during the class last summer." (Teachers)*

To accomplish this we created teams to work on the remaining tasks of the project - planning our exhibition and writing our final report. This team arrangement, while cross-divisional, had a central purpose, and the teams functioned without other issues interfering, because the purpose mattered. However, getting to the final exhibition proved difficult. Teachers were overextended, fragmented, stressed and felt they'd spent too much time away from their classrooms. Throughout the year it was difficult to rise beyond individual goals to the larger view beyond the classroom, or the school division, to the State and the profession itself. With our focus now at the division level, this collective conclusion seemed anticlimactic to some. Yet it was ultimately necessary and proved exciting and valuable to most. Exhibition attendees included superintendents, teachers, school board members, instructional supervisors, principals, a Dean of a college of Education, and Department of Education representatives. Comments on our work included:

> *"The exhibit was an effective model for individual staff in-service training. By allowing teachers to visit and ask questions of practitioners, they can assess the application to their own classroom."*
>
> *"I like the holistic writing scale's specificity and longitudinal look at a student's development in the different areas. I hope eventually that anchor papers at different grade levels can accompany the scale to make it more objective for users."*
>
> *"The exhibit/assessment gives meaning to the SOL's."*
>
> *"Why, in listing your rubrics, do you start each rubric list with your 1's and a more negative statement that states what each child cannot do? I've never seen rubrics that way before. I've only seen lists begin with the four or five. It just gives a more positive impression."*
>
> *"Assessment is very on-going. Children knew what to look-for and were made responsible to follow-through with steps. Steps were very visible."*

"I appreciate the heightened awareness on the matter of what we should teach that studying assessment generates. I don't think assessment should loose (sic) sight of correctness as a standard tool."

"(Assessment)Seems to have changed the way these teachers approach all aspects of instruction."

"It was impressive to see the detail in the drawings at the 2nd grade level. I try to get 7th graders to do as well! Really dramatic products."

"It is so important to make students responsible for evaluation of their work, and for creating the criteria by which work will be judge."

"Very impressive with the "risks" these teachers took to look at before's and afters and move to total authentic assessment in very "traditional" areas!" (Teachers)

MAKING CONNECTIONS

Both the process of making connections and applying new expertise at the Division level have taken many forms. Meetings with project participants and division level instructional staff were held in each Division. These meetings led to plans for continuation and application of this work beyond the project year. Applications include:

- continued development of assessments for a newly adopted manipulatives math curriculum;
- pilot testing of a more assessment driven reporting procedure;
- further developing English Language Arts Portfolio and writing workshop strategies;
- forming and supporting study groups;
- leading inservices on assessment and assessments in specific curricular areas;
- leading inservices across divisions;
- bringing together all those who have participated in assessment projects to share and develop their work;
- mentoring projects;
- offering of assessment graduate courses;
- and group publication of articles about assessments and becoming assessors.

WHAT DIFFERENCE DOES THIS MAKE?

It is uncommon for this type of activity to render the deep and profound change in teachers' attitudes, beliefs, and practices that occurred in this project. Significant change took place and will continue to take place as a result of this project. These changes are best reported in the words of the participants.

"I now think assessment first when planning units with teachers, or when I am going into a teacher's classroom to teach or do a demonstration. It has changed the whole direction of my planning. I now see teachers as professional facilitators of learning who provide opportunities for learning of real world knowledge and skills, and the student exhibition of those."(Supervisor)

"I know how to develop more meaningful assessments for what I'm teaching. I'm learning how to translate the information gained from assessments into communicating this information with parents."

" Work is more student centered in that they know more of what they are doing because they help set goals, do self evaluations, and are learning how to direct themselves toward goals."

"I feel I have the opportunity to use better tools in reporting to parents their child's educational progress and or needs, to use these assessments, along with the standard forms, to gain a more complete picture of children's instructional needs and to try to meet them in my teaching methods. Now I have solid reasons for what I do in my classroom -instead of merely following a text, preset curriculum, etc."

"I look at children in a different way-- I see what they can do and go from there. I used to look at what they couldn't do."

"I involve my students in more thinking and stimulating challenges and less rote and remembering texts."

"The most rewarding experience for me has been the contact sharing of ideas and information with teachers from other school systems. The outside contact opened up a new world for me."

"Mainly this group of teachers was very committed to their profession and very willing to spend long hours discussing and learning better methods to teach. I have been unsettled by this learning process...I am learning how to make my math assessment more process oriented and challenging for the children."

"After this experience I have strong feelings about being treated professionally and receiving adequate compensation for my work. I believe in change but feel teachers need release time to be able to learn about new ideas. Teachers cannot be expected to work day and night. Divisions need to consider sabbaticals or leaves of absence with pay."

"I'm much more reflective on questions such as: how will this benefit students, what bearing does this have on real life? I am finding that I think more in terms

of what does the student need and how I can access that growth and not so much about what is prescribed to be taught."

"The chance to talk, endlessly it seems, with other colleagues has been the most rewarding professionally for me. I have learned so much from our conversations, debates, discussions, etc. I am glad that I chose to participate in this excellent opportunity."

"I'm realizing that good teaching is quality teaching; setting up real engaging situations. Teachers don't need to have a million cute activities to be good--although they may be. I think I am seeing the 'meat' of teaching and assessing as I haven't before. It doesn't matter as much what your teaching as how you are teaching it."

"I think more now about letting students help set look fors and letting them know what I am looking for. I am more aware of having real life tasks not just activities. I am also seeing how assessment guides instruction."

"I did not enter this project for the money, but sometime it feels that as teachers we are tremendously undervalued."

" I have always been creative and innovative but have put little effort into accountability for report cards. I now explain and use charts to allow students a better understanding of what I'm 'looking for' - before, during and after an assignment."

"I tend to use the term 'look fors' frequently with the children in preparing them for what we are about to do. I have prepared assessments for units of study and have involved parents in assessing their child's work (they weren't perfect assessments, but they were a beginning) I tend to think of the outcomes I want before I begin the unit. This I think is the most important change I've made."

"If others are to repeat this process or one that is similar, is there a way for it to be made less stressful?...The work is excellent, the progress is phenomenal, the direction in assessment seems to be a proper one..."

"I have completely changed my methods of assessing language arts, especially reading related skills and outcomes. I'm in the process of making changes in my math assessment techniques. As I make plans and implement those plans, my thoughts are continuously of: what outcomes do I want, what activities will lead students to that outcome, do these activities include higher level thinking and open-ended tasks, and how do I link assessment to these activities."

"It has been a rewarding year for me professionally. It has been a blessing to meet so many new friends and professionals as we struggle, we realize how much we still have to learn and we share successes and failures with one another. It seems that down the road we turn and realize that we have taken a few steps forward that we didn't realize we'd taken. We slowly continue...this process of change..."

Our Voices

by Becky Fisher, Jane Daniel, Donna Hollins

WHAT WOULD IT TAKE FOR TEACHERS
TO UNDERGO SIGNIFICANT CHANGE?

Each and every participant in the Blue Ridge Assessment Project (BRAP) had a different set of experiences. Many teachers changed a great deal as a result of these experiences and yet some became more entrenched in who and what they already were. While similar opportunities existed for everyone, the types and extent of the changes depended upon the individual and the curriculum.

There were times in the BRAP meetings over the year when it became obvious we each had different expectations for ourselves and of the project. We sometimes experienced what appeared to be a lack of common purpose, and since there were many project and personal goals present at the same time, and different people chose to focus differently. In this situation where no one right answer was promoted, frustration and discomfort levels increased. There were times when the group did not function well - people talking over other people, or people attacking ideas instead of providing helpful feedback. Most participants agreed, however, that the experiences were worthwhile in opening up dialogue about our process and our products.

Very early in the project, participants realized that change is not easy and is on-going. Reflection on our year-long experience leads us to suggest that the climate for change includes these salient features: support, timing, attitude for risk taking, empowerment, the need and desire for change, and motivation. Motivational factors could include: mentors, students, course work, colleagues, professional conferences, professional interactions, and professional literature.

In this section of the report, several BRAP teachers share their personal processes in becoming more authentic teachers and assessors, but perhaps one voice, Christine's, typifies the struggle. Christine's section is followed by other participant voices. Within these statements, we think you will find common themes about change.

Christine recounts that she has pursued more professional development opportunities in the past year of teaching than she had in the 10+ previous years altogether. Christine saw authentic assessment as "the hope and promise of what education should be." The following excerpts are taken from the journal Christine kept throughout seven months of BRAP as she worked to make the hope and promise a reality in her own classroom.

***3/15/94** (in a note to one of the authors) I'm sending my original notes...I don't think they'll help much other than to reveal the turmoil that exists when you try to drastically reform your thinking and teaching methods.*

In this note, Christine summarizes her professional life during this year. She constantly questioned herself and her practices, trying to make sense of what she was being exposed to. Why did she try so hard to reform her thinking and teaching? Why did she continue in the change process even when it got uncomfortable? What is it that allowed her to develop this attitude for risk-taking?

9/18/93 ***I was stunned by Wilders's dismantling of the Common Core of Leaning so suddenly. At first, I didn't believe it would really be gone. On reflection, I realize that he killed a document but he cannot stop the ideas from flourishing in the classroom where they really count......***

When we began the project, we were looking at Virginia's Common Core of Learning (CCL) as a framework for public education in Virginia. Our assessments were to be tied to this document. Among the BRAP teachers, there were various levels of understanding and support for CCL.

At the first planning meeting we began learning more about the CCL, its broad ideals and the changing future of education in the Virginia. The philosophy of whole-child education in contrast to education in discrete subject areas was seen as leading to more opportunity for both the children and teachers. We were excited about the prospects. Still others saw that educational practices once doubted would now be essential. Cooperative learning would be a statewide expectation. Writing across the curriculum, mediation and critical thinking would happen in every classroom. However, the Common Core remained rather nebulas and was not easy to categorize nor understand. In its absence we returned to the Virginia Standards of Learning, choosing to make meaning of them and infuse them with life through good thought and practice.

9/18/93, con't.
As I read [Integrated Components of Appropriate and Inappropriate Practices in the Primary Grades] I found myself constantly questioning certain things. By the time I got to the end, it left me with a creepy feeling - ...so many of the identified inappropriate practices were things I questioned and doubted when I first became a teacher 12 years ago.

Here, Christine shows herself engaging in reflection regarding her own teaching practices after reading literature on early childhood education and practice. So often, teachers find themselves doing what they've always done instead of stepping back and asking themselves tough questions, like "why am I doing this?" Rarely are teachers encouraged to question, especially "on the clock". The definition of a teacher's work and workday is what he or she "does" in the classroom. Providing the time for thought is rare. Developing the expertise necessary to maintain professional growth is rarely recognized, valued or encouraged. If the educational system is to undergo any significant changes, controversial information like what "Integrated Components of Appropriate and Inappropriate Practices in the Primary Grades" was for Christine must be available for knowledgeable professionals to debate and work to understand. How many teachers are part of discussion groups that are professionally supported and acknowledged by their school-divisions?

11/7/93
I feel like I am just beginning, but I have come a long way since August. I think I finally know how to make my project authentic - not just for the kids but for me. After [the November 5] meeting I finally am beginning to think I can do this and have it be worthwhile. I will totally rewrite my project

AGAIN!

In much of the professional literature, the terms alternative assessment, authentic assessment and performance assessment are used interchangeably. Are they the same thing? If not, how do they differ? These questions drove much of our learning and writing.

At this stage, Christine's project dealt with students performing a task related to pattern recognition and description. For example:

Outcome: Students will recognize, use and create patterns.
Strategy: Students will be exposed to patterns across the curriculum throughout the year.
Fill in the blank to complete the pattern.
1) 1, 3, 5, 7, __, 11,
2) 22, 24, 26, 28, __, __.

With further revision, her tasks become more open-ended and complex, allowing for multiple responses.
Example: Use the grid to help you find number patterns.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

Write your patterns from left to right with spaces and commas between numbers. Extend your patterns.

However, these were tasks for task's sake, and not grounded in real-life situations. After rewriting, her project involved students using number patterns to count money. For example, her "look-fors" at this point were:

-Student is able to identify coins and tell their value.
-Student can explain an appropriate strategy for grouping coins to count them.
-Student is able to count on from 25 by ones, fives, tens, and twenty-fives.
-Student is able to determine the value of coins to $1.00.
-Student can select coins to make designated amount of money to $1.00.

The context for her assessment was becoming more authentic. Yet, she hadn't abandoned her year-long patterns theme as the focal point throughout the instructional year.

1/31/94
My assessment grew from patterns (geometric to number), to using patterns to count money, to counting money in an economic community and developing a system of managing money. Another pattern.

Christine's project was now moving toward a simulation of an authentic experience. Playing the roles of shop keeper and customer, her students recreated an economic community. Students had budgets and accounts to manage, and found themselves making choices based on real-life considerations. Christine sought to improve her project even further by developing an economic community within a real-life context. She began to consider how the students might manage money for class field trips or bake sales.

3/2/94
Looking back over my notes, I realize that most of what I grappled with had nothing to do with assessment - at least not directly. I didn't pursue many of my ideas for the project. However, all of the professional development that occurred had a profound impact on what I do in my classroom and a profound impact on my own attitudes and perspective on my teaching career.

Last year I was ready to give up teaching and look for a new job (job - because this is what teaching was to me - not a career). My involvement in this project has turned my teaching job into a career...Not since my first month teaching have I had such dedication and enthusiasm. From my second month teaching until this year I have felt frustrated.

I think that four things have been responsible for turning things around for me -

1. ***a decent pay raise this year.***
2. ***being treated like a professional in this project.***
3. ***professional development with conferences and the contact with peers from other school systems, and***
4. ***the hope that alternative assessment brings us closer to the ideals that I held just prior to and during my first year teaching.***

In this entry, Christine summarizes her transformational year. What if every teacher were able to experience a professional development rich school year? What if every teacher were treated as a professional in every way? What if all teachers held to their idealism and were solidly grounded in their professional philosophies of teaching and learning? The possibilities are rich. Education would be the promise we've always held it to be.

The conditions necessary for change are many and varied. You have read to what Christine attributes her changing. Here, we return again to our opening question and ask, **what would it take to undergo significant change?**

Every participant entered the project with a different knowledge-base and expectations. Each person has experienced a different, personal process of becoming an assessor. The greatest potential for impact comes from the long-term change that•may result from having participated in this project.

Christine's journal entries detail her process of becoming an assessor. Will she continue to become? As another participant, Sue, wrote in her communication with the writing team,

"It's the satisfaction of watching children choose, struggle, communicate, decide, learn, grow....it's a tough thing to measure. Especially when you're in the midst of it for the first time, trying to decide what your own role should be."

These words also reflect Christine's experience and are important for our own learning as professionals. These words describe the experience of many throughout the year. Learning is becoming; knowing is learning to become well.

Why did others become involved in the Blue Ridge Assessment Project? What did they expect to do within and take away from this work? Paula for example, got involved because she wanted the opportunity to talk with teachers about something that matters. Rick knew that someone would be developing authentic assessments and felt that it might as well be him! Donna felt like it was a professional opportunity she was interested in pursuing.

Late in the project, Jane felt that in her career she had *"been on the cutting edge and [she didn't] want to get off."* Jane continued,
"It's been a roller coaster ride full of frustrations, headiness, risks and ups and downs. Despite the rocky ride, I always come back to the start - the kids: watching, confirming, affirming, reaffirming so kids can take their own ride of lifelong learning."

Another participant, Joan, wrote, *"I have found, in my personal evolution as a teacher, three things happened. First, I've had to be a 'risk-taker' to some degree.... to 'risk' in front of my peers, administrators and parents. Each has helped me recognize and analyze along the way. Second, I have obtained a kind of supportive respect which I have obtained from my administrators and district supervisors. As I have proven the progress of my students, my superiors have given more support to my endeavors. Third, a 'rippling effect' has occurred...my fellow teachers have become interested [in my methods of assessment] and....have met, set standards, developed methods of assessment and used a portfolio in reporting to parents, students and next year's teacher. As I continue my work with the children of the district, I plan to be a life-long learner myself. I plan to continue to be a 'risk-taker' while continuously basing my risk-taking on sound educational principles. I encourage every teacher to take the extra time to step out of the classroom. By becoming involved in workshops, continuing in educational courses and taking part in state projects, we can return to the classroom renewed and ready to meet the needs of our students."*

Carole, reflects on her process of change. *"I was the typical traditional teacher. I looked at kids as empty vessels, and it was my job to fill them. I enjoyed being in control--managing the classroom like clockwork--manipulating little kids and telling them what to do. I had a strong belief in retention--the gift of time--being at the top of the heap next year. Parents liked me and I often had the children for two years--giving them more of the same next year. I knew nothing about processes, only programs and I was pretty good a plugging kids into slots. I realized some kids weren't getting it no matter how many times they went through a center."*
Carole continued,
"About seven years ago, I realized I couldn't go on teaching this way; I'd never make it to retirement. Then I met the new early childhood facilitator. I asked her to come in, observe, and give suggestions. My classroom wasn't the way I wanted it to be. Well, this facilitator never tells you what to do. She just makes suggestions and asks questions. 'Why do you do this? Did you ever think to do this?' As I answered, she fired the next question. She really made me think about my own beliefs, philosophies and practices. She introduced me to current ideas through reading works by Lucy Calkins, Regie Routman, the Goodmans, Donald Graves, and Marie Clay. All of this new

information helped me sort out my beliefs. My new mentor connected me to others struggling to answer the same questions. We began meeting on a regular basis. It was invigorating to be made to think, question, observe, try new things, meet again and reflect, reflect, reflect. This new knowledge and challenge helped me make some changes in my classroom and made my teaching exciting once again. I changed slowly - a few things each semester. My first change was to let children select their own activities. I would provide them with several choices. I was surprised to find most children chose to do them all! As I continued to change, I met with colleagues also changing bit by bit. I now see that these meetings saved many of us and kept us in the profession. This project was an extension of these meetings, an environment where I could continue to grow, ask questions and reflect on my work as a teacher."

These voices are unique yet predictable. The evolution and development of our teaching philosophy is quite individual, and certain inherent features enabled us to effect change. The things that enabled us or inhibited us as we developed rested both within ourselves and within our contexts. We see these elements as: support, timing, an attitude toward risk-taking, empowerment, the need and desire for change and motivational factors including mentors, students, course work, colleagues, conferences, professional interactions and professional literature.

Our Recommendations

RECOMMENDATIONS TO ENHANCE TEACHER LEARNING AND CHANGE

Educational change and reform are not accomplished on the drawing board, in the corporate office, or on a computer screen, but in the classroom. In order for change and improvement to occur in classrooms, teachers need meaningful, rich, authentic learning experiences like those we increasingly expect them to provide for their students. Learning of this kind among teachers requires they be allowed choices, ambiguity, missteps, restarts and varying degrees of individual commitment and progress. Such learning is therefore best assessed in authentic ways. Our assessments of teacher-learning should be important in real life, place teachers on a continuum of learning, improve performance, be on-going, encourage justification and allow us to look objectively at meaningful performances and products. Professional development practices which adhere to these principles are in greater concert with what we know about leaning and making meaning (Fosnot, 1989) and about bringing about change in individuals (Fullan, 1985, 1994; Murphy, 1991) and institutions (Fullan, 1994; McLaughlin, Talbert, & Bascia, 1990). Models of this sort reflect the types of changes we are advocating for child learning and have long been the basis of adult education theory and practice. They deserve greater use, attention, and research in the professional development of teachers. Thus, our recommendations address those things that promoted real change in the practice of our participating teachers, and are those that we feel would provide the type of environment and processes needed to accomplish educational change beyond developing assessments.

Provide for on-going collegiality and inquiry among teachers

More than anything else teachers commented about learning, growing and changing as a result of real, meaningful interaction with one another. Teachers must be afforded the time, opportunity and support to get together and talk about meaningful issues in education, to craft ways of addressing these issues, to try their ideas, to give and receive feedback, and to adjust and make alterations. One teacher called this "reading, thinking, doing and talking." What teachers become as result of such experiences are teacher researchers, teacher experts and teacher authors with much to offer their classrooms, their peers and their profession. Early in the project we expected to use VAPEN consistently for sharing information and making connections. However, only a handful of teachers already had a VAPEN account and a working knowledge of the system. We pursued getting accounts,but inadequate hardware availability was our biggest challenge. Later in the project, fax transmission served our need for quick conversations about our work. Technology can assist in communication, but barriers must be removed before technology will serve the purpose of bringing teachers together.

Promote opportunities for learning by doing

Those of us who wrote, wrote more, rewrote, and struggled with each successive project and performance, learned and changed. Learning by doing in a supportive, collegial environment required us to speak from our own experience rather than abstractly from what we thought ought to happen. Doing promoted real, intellectual struggle. For some this was overwhelming. Meetings dates became difficult deadlines. Exhibitions and meetings required public performances of what teachers were learning and accomplishing.

Within learning by doing we must strive for balance between instruction and practice. What, when, where, and how instruction is needed and provided varies by individual and circumstances. Yet, to overload the process with precision stifles the opportunity to make attempts and adjustments. We recommend a greater team focus. Both individual and collaboratively produced products from a team can then provide multiple levels of learning and performance.

Uncertainty and not knowing are challenges for teachers; admitting the uncertainty and not knowing often pose even more difficult challenges. Learning the complexities of alternative forms of assessment takes time and requires risk-taking on the part of the teacher. Proficiency is an ever increasing spiral, as mastering one thing brings into focus new issues not previously seen or understood. *Becoming an assessor is a process of education not training.* Maintaining a balance between ambiguous doing and greater precision as we move toward higher levels of performance and proficiency is a challenge deserving more research and attention.

Engage teachers in the process of reform as equal partners

For too long teachers have been separated from the real, challenging, political realities that influence and ultimately regulate classroom direction. Teachers need opportunities to discuss, know about, and address these very real influences out in the open, not behind closed doors. Commitment to change then becomes deeper and change becomes less demanding and difficult and more exciting and rewarding. Change managers and leaders should provide a supportive structure, with places and time to talk, and opportunities to influence. However, we must accept that not every teacher will understand or want to participate in this process, just as some administrators chose not to participate.

Develop mechanisms for teachers to share their knowledge and experience

Teachers must have real opportunities to share their insights and raise their voices. Provide forums for teachers to share their research, their new knowledge and writing. Create vehicles within the system to support individual and collective inquiry and to share the results.

Adult Education in Virginia currently sponsors the Adult Educators Research Network (Cockley, 1993). The Adult Education Centers for Professional Development at the Virginia Commonwealth University are using learning plans to support staff development for adult educators throughout the state (Drennon, 1993). Teachers, facilitated by trained staff developers, determine their own learning needs and questions, alone or in concert with colleagues. The learning is supported by local study groups and some state funding. Summer institutes and other professional publications provide opportunities for sharing the knowledge gained. Increasingly, expertise is drawn from local ranks for more traditional workshops and information dissemination sessions. All educators throughout the Commonwealth of Virginia deserve such focused state-supported and sustained opportunities to share their insights, knowledge, voices and perspectives for the ascent of education to reach new heights throughout the Commonwealth.

Encourage collaboration across divisions

Our work was collaborative across school divisions. For future efforts we recommend at least two participants from the same school with at least four, and preferably six from each school division. Small schools will also need to be accommodated by pairing teachers from similar locations and backgrounds. Any mix of school divisions from two to six provides beneficial results if their is regional proximity to facilitate meeting logistics. This design permits individual, pair, school, division and regional exchanges. In our project, cross divisional interactions opened eyes and provided opportunities for all. The collaborative, cross-divisional nature of this project allowed the teachers and the steering committee members to support and build on one another's ideas. In addition, the Steering Committee structure gave us product champions at the division level. As a result, we now have six different ways in which our work is currently being imbedded into the on-going efforts of each school division.

Seek leadership that is facilitative and responsive

Collaborative work of this nature, which we recommend, requires awareness of multiple audiences and goals. Leadership must work to keep all involved and constantly recognize that audiences and their relative importance in the process often change. Leaders monitor these changes, recognize the political reality of change, and keep direction and purpose in sight. We recommend the continued development and nurturance of such leadership among teachers and administrators at the state and local level.

The current DOE staff development facilitators are valuable resources for this kind of effort. In fact, this kind of effort, coordinated by a staff development facilitator and led by local teachers, advances teacher-learning and educational reform. Done in concert with knowledgeable instructional leaders at the division level, efforts are coordinated, grounded in the research, and lead to good practice and increased learning on the part of students.

Restructure to plan for and actively support on-going teacher-professional development

We must value and support teacher learning in the same way we value teacher classroom instruction. We must better organize our schools to support the education professional so that she can better do her professional work, including the professional work of change. The use of technology, a strong, well trained para-professional staff, and meaningful professional development during the professional year are paramount needs. As a result of our experiences this year we strongly recommend reexamination of our support systems for on-going professional development. Specifically, we suggest that off-site, intensive professional development be expected and planned during the academic year with full pay and consistent instructional support for the classroom. Paid sabbaticals also deserve serious consideration.

Initially, school building staff might be designated into three categories: developers, refiners, and mentors. Developers would be off-site as much as 15% of the school year working on useful and valuable projects for the individual, the team, the school, the division, and the profession. With this approach, the principal would know that a full third of the staff would be out of the classroom for up to 15% of the teaching days. Planning for this in advance would enhance the change process in schools, making change less isolated and more integrated to the actual professional context of the learner. The year following a professional development year, the refinement year, might include meetings with on-site study groups to maintain and extend the learning and reflection, meeting with college and university personnel, publishing and presenting. Third year mentors would work collaboratively with colleagues, 2 student teachers, new teachers for the division, and administrators. Therefore, approximately every four years every professional would engage in active, in-depth on-going professional development activities of value to the system.

If we come to agreement that teachers will be out of the classroom consistently then we must find ways to maintain instructional continuity. Teachers must carefully prepare for days away from their classrooms, knowing that the work they are doing outside of the classroom will have positive effect on later work. A cadre of substitutes should be on hand who are familiar with the school, its teachers, and its students. In addition, a stronger, better trained paraprofessional staff, who are informed and involved with the building are necessary. This might be done by committing to a certain number of building level substitutes who will serve the school through the year and be brought into the instructional plans. Teachers could plan for their professional development leave in advance with their colleagues, principal and substitute. Instructional needs and plans could also be shared and mutually addressed. Follow-up would be built into this system. Thus, the substitute is not just a convenient someone at the other end of the phone but someone who serves as instructional support within an organized instructional plan. We believe this would cost no more than the current system. It would create much greater satisfaction for all involved and result in better teaching and learning.

Be aware that there are multiple forms and purposes of assessment

The National Council for the Teaching of Mathematics (NCTM) provides us with a strong framework for understanding the purposes of assessment (Appendix C). We recommend using this framework as a means of understanding and talking about assessment purposes and practices in the Commonwealth of Virginia. Much of the current rhetoric, kinds of knowledge, and developing practices use terms and tools in ways that are confusing and unclear. Issues of assessment and accountability need to be seen as linked and on a continuum; education about assessment, on a grand scale, might begin with these distinctions and then proceed to articulation of assessment types and contexts for use.

Within this framework we can then move toward building a stronger link between the instructional and accountability uses of assessment. Linkages between individual classrooms, buildings, divisions, and state level assessment practices and measures could then be made more explicit.

Our current practices are disjointed and counter productive. We must educate our profession and the public to the purposes and pitfalls of testing and measurement. Then we can move to inform and educate about assessment practices which are congruent with what we want children to learn and be able to do. Let us agree on the purposes and proceed with discussion regarding the many and varied means.

Be clear about how and why assessment and instruction are inexorably linked in quality education

Teacher training and most current experienced teachers seem to focus on activity rather than intention or outcome. Fundamental to understanding assessment is the conceptual recognition of its direct relationship to instruction and its ultimate ability to assess or measure. **Activity alone does not assess.** Instruction in alternative forms of assessment must clearly present this distinction before additional learning can proceed. However, additional characteristics of more authentic forms of assessment stretch the concept of testing which is our traditional understanding of measurement. These distinctions can be advanced once it is clear that assessment is more than activity.

Recognize that not all teachers need to become alternative assessment designers in order to be knowledgeable users and consumers of alternative form of assessment

We recommend all teachers engage with alternative forms of assessment through active learning. However, not all teachers need to meet the standards of assessment design for publication. Teachers could become familiar with alternative forms of assessment through group review sessions where existing assessments are scrutinized. Becoming assessors requires understanding as an intregal part of instruction. However, not all teachers need to be assessment designers to become effective assessors.

As alternative forms of assessment advance, expect the look of the classroom to change

In our world today, we are increasingly required to understand and communicate more complex information with a wider variety of people, as well as solve new problems. This requires us to use information in new and different ways. However, our schools do not consistently provide learning opportunities and environments where learners can practice using complex skills and be provided with useful feedback. Our current learning environments are overly controlled and artificial. Learners continue to tell us this by their premature departures and their inappropriate behaviors. Employers continue to tell us this by their outcries for more skilled workers. Educators tell us this by their professional disengagement and burnout.

Moving toward more authentic forms of assessment requires more authentic forms of instruction. When these are coupled in a meaningful and educationally sound fashion, parents', employers' and students' participation and satisfaction will be substantially improved.

Linking authentic instruction with authentic assessment leads to classrooms which will prepare children for the complex world of the Twenty-first century. These classrooms are necessary. Working together these classrooms become places where education grows and children and teachers become assessors of their learning.

Our SOL/Curriculum Analysis

We conducted this analysis of the Virginia Standards of Learning (SOL's) and each available division curriculum to provide common ground for our assessments. The analysis includes the second, third and fourth grade local curricular objectives and State SOL's in the academic areas of English Language Arts, Mathematics, Social Studies, and Science/Health.

We did not rewrite any SOL's or local curricula but looked at existing standards in a new way. To arrive at this curriculum analysis we first talked about and brainstormed what we thought was needed. We had hours of conversation about what was essential for children to know and be able to do. We then agreed, that given our limited charge, that we must work within existing parameters.

We reviewed national standards and literature regarding curriculum. Together we made the following decisions. First, we chose to use the National Council of Teachers of Mathematics (NCTM) standards for mathematics because of its conceptual rigor, elegance and utility. Second, we chose to use the National Council of Social Studies Standards again for its conceptual rigor, elegance and utility, particularly for the elementary level of schooling. Third, we chose to incorporate Science and Health as one larger academic area of study. With this decision we found it necessary to create our own organizing schema. However, there are national efforts in Science which deserve consideration. Finally, we found current national Language Arts efforts less appealing for our needs and chose to create our own schema.

A team of graduate students worked to review all of the SOL/curricula and propose organizing frameworks. The Blue Ridge Assessment Project team teachers and steering committee reviewed their work and made changes as needed

We sought to reorganize discrete SOL's into larger common categories within the four academic areas of English Language Arts, Mathematics, Social Studies and Science/Health. During our analysis we became aware of concepts or processes which overlap between academic areas. We chose not to reorganize based on these commonalities. For our purposes, it was enough to become aware of these areas of integration, building them into our assessments where appropriate.

Our reorganization of the SOL's and local curricula revealed areas of strength and other areas deserving greater thought and consideration. This entire process of curriculum and analysis served as a checks and balance system for what we say we want children to know and be able to do and what we, in fact, teach. For example, in English Language Arts there was much talk about cultural knowledge as valuable but no SOL's or local curricula in Language Arts dealt directly with enhancing cultural knowledge. In Mathematics we found strength in areas of number sense and whole number computation but little in statistics and probability. For Social Studies we found emphasis on categories: people, places, and environments and time, continuity and change. Finally, our category of Science/Health as understanding patterns and relationships leads naturally to integrated curriculum efforts as patterns and relationships are the basis of both Mathematics and Language Arts. Interestingly, the category we simply describe as discovery has few objectives, suggesting an area needing more focus and attention.

This curriculum analysis document allows the Divisions themselves to examine their own curriculum and make adjustments as they see fit, remembering that curricula and standards are a moving target, needing continual attention. What we now have is a framework which addresses each participating Division.

We use the larger categories of the curriculum analysis to define the areas of focus for our assessments. For example, Peggy Simpson's Social Studies assessment on page 3-193 identifies the major focus as production, distribution and consumption. This designation comes from the assessments major SOL placement in the curriculum analysis. Other SOL's addressed by the assessment are also listed below the focus. This correlation leads to greater integration of both instruction and assessment.

Finally, the analysis is not grade level driven. We need benchmarks and age/grade level benchmarks make sense but learning occurs on a continuum. Thus, we chose to layout the curricular objectives and SOL's continuously for second, third, and fourth grade levels. Many of the same or similar SOL's are repeated at each grade level without articulation of what distinguishes performance from one grade level to the next. Together, our analysis and assessments seek to provide more specific data on what is both expected and learned in the early elementary level of schooling.

CATEGORIES
LANGUAGE ART CURRICULUM

Comprehension skills - objectives with the goal of increasing the students ability to understand written and oral language.

Creative processes - objectives with the goal of creating divergent thinking in students and allow the student freedom in expression.

Critical thinking - objectives which focus on the student using analysis, synthesis and evaluation to accomplish the objective. Usually involve some level of problem solving.

Cultural knowledge - objectives which increase the student's awareness and understanding of cultures different from the student's.

Intellectual pursuits/esthetics - objectives which broaden the student and encourage the student to explore unfamiliar ideas, topics, genres, etc.

Personal knowledge - objectives which ask the student to explore his/her own feelings and ideas.

Process skills - basic objectives which cover skills needed to perform the operations of reading, writing and speaking.

Research skills - objectives which cover skills needed to find and use research materials.

Story concepts - objectives which lead to an understanding of story parts, such as character, plot, sequence, resolution, conflict, etc.

Word study - objectives which cover the structure, meaning and acquisition of words.

Writing process - objectives that lead to students skill in writing printable material. Editing, drafts, style, composition, unity would be topics found under this heading.

BLUE RIDGE ASSESSMENT PROJECT

Language Arts Area of Study	*Virginia Standards of Learning (SOL)*	*Harrisonburg*	*Albemarle*	*Orange*
Notes		Harrisonburg has a Language Arts curriculum guide based largely on the SOL'S with several local objectives. (LO = local objectives)		
Comprehension Skills	• The student will follow multi-step oral and written instructions. (2.2) • The student will find and use factual information in a reading selection. (2.5) • The student will increase listening, speaking, reading, and writing vocabularies. (2.8) • The student will understand the function of a paragraph. (2.9) • The student will read independently with comprehension. (3.3) • The student will find the main idea when it is stated in a reading selection. (3.4) • The student will identify details which support the stated main idea of a paragraph. (4.3) • The student will distinguish between fact and opinion in a reading selection. (4.4) • The student will use context clues to aid comprehension. (4.6) • The student will distinguish between fiction and nonfiction. (4.8)	• SOLS • Local Objective (LO)	• choosing appropriate reading material • monitoring understanding of books and stories; self-correcting miscues • relating ideas and information in text to prior knowledge • comprehending facts, details, main idea • differentiating parts of compound words • responding to speakers' messages • asking and answering questions (who, what, where, when, how, why) • attending to unfamiliar terms and concepts • using context clues to meanings of unfamiliar words and concepts • reading easy chapter books fluently and with understanding • using pictures, captions, headings and subheadings, table of contents, and index to facilitate location of information and comprehension of nonfiction • reading a wide variety of chapter books and also juvenile non-fiction books • using pre-reading strategies for establishing purpose and relating new to known • asking questions of text; assimilating information; relating ideas and information in the text to prior knowledge • self-monitoring of understanding; self-correcting miscues	• The student will use prereading strategies. (2.3) • The student will find inferential and factual information in a reading selection. (2.6) • The student will use prereading strategies. (3.3) • The student will read independently with comprehension at his/her independent level. (3.4) • The student will understand the function of a paragraph. (3.9) • The student will identify details which support the stated main idea of a paragraph. (4.5) • The student will distinguish between fact and opinion in reading selection. (4.6) • The student will use context clues to aid comprehension. (4.8) • The student will develop a vocabulary useful for learning and responding to instructional content and experiences. (4.15)

Note: Rockingham, Fluvanna, and Greene Counties use VA SOL'S as their curriculum guide for Language Arts.

BLUE RIDGE ASSESSMENT PROJECT

Language Arts	***Virginia SOL'S***	***Harrisonburg***	***Albemarle***	***Orange***
Creative Processes	• The student will communicate ideas, concepts, and feelings through creative dramatics. (2.3) • The student will predict story outcomes. (2.7) • The student will share personal experiences and feelings in writing. (2.13) • The student will participate in storytelling and choral reading. (3.1) • The student will write brief fictional and nonfictional narratives. (3.9) • The student will recreate sensory experiences. (3.14)	• SOL'S • The student will participate in visual, auditory tactile, and kinesthetic experiences which enhance language development. (LO 2.22)	• playing with words	• The student will communicate ideas, concepts, and feelings through creative dramatics. (2.2) • The student will share personal experiences and feelings through writing process activities. (2.11) • The student will acquire experiences necessary for language development and thinking. (2.16) • The student will participate in storytelling and choral reading. (3.1) • The student will write brief fictional and non-fictional narratives. (3.12) • The student will draw on sensory experiences for oral and written communication. (3.17)
Critical Thinking	• The student will predict story outcomes. (2.7) • The student will recognize emotional reactions and motives of story characters. (2.11) • The student will understand how purpose and audience affect writing. (2.15) • The student will draw conclusions from information obtained from oral or written material. (3.12) • The student will participate effectively in informal classroom discussions. (4.1) • The student will distinguish between fact and opinion in a reading selection. (4.4) • The student will review and evaluate new concepts and ideas obtained from texts and apply this information in other situations. (4.7) • The student will vary written and oral communications according to purpose and audience. (4.13)	• SOL'S • The student will demonstrate growth in the process of logical thinking. (LO 2.20) • The student will write for a variety of purposes and audiences. (LO 3.15)	• asking questions to clarify understanding; answering questions about text • comparing stories and authors; comparing versions of the same story • distinguishing between what is realistic literature and what is fantasy • analyzing characters and their motivation • relating cause and effect • using clarification strategies (repeating, restating, explaining, demonstrating) • using language to imagine, hypothesize, justify, predict, and express emotion • stories behind spellings of unusual words • distinguishing between fiction and nonfiction • relating ideas in text to other texts and contexts • evaluating information • comparing and contrasting • drawing conclusions • asking questions of text; assimilating information; relating ideas and information in the text to prior knowledge	• The student will predict story outcomes. (2.4) • The student will find inferential and factual information in a reading selection. (2.6) • The student will recognize emotional reactions and motives of story characters. (2.9) • The student will understand how purpose and audience affect writing. (2.13) • The student will draw conclusion from information stated or implied from oral or written material. (3.15) • The student will participate effectively in informal classroom discussions. (4.1) • The student will distinguish between fact and opinion in a reading selection. (4.6) • The student will review and evaluate new concepts and ideas obtained from texts and apply this information in other situations. (4.9) • The student will vary written and oral communications according to purpose and audience. (4.16)

Note: Rockingham, Fluvanna, and Greene Counties use VA SOL'S as their curriculum guide for Language Arts.

BLUE RIDGE ASSESSMENT PROJECT

Language Arts	***Virginia SOL'S***	***Harrisonburg***	***Albemarle***	***Orange***
			• selecting appropriate sources for gathering information and answering questions • comparing different versions of a story, including different media • discerning author's purpose • distinguishing between fact and opinion • determining cause and effect • identifying implied main idea • understanding relationship of main idea and supporting details • understanding and using figurative language (idioms, metaphors, similes, parodies, analogies) • stories behind familiar and new words	
Cultural Knowledge		• SOL'S		
Intellectual Pursuits/ Aesthetic	• The student will choose to read various types of material on a variety of subjects. (3.5) • The student will use leisure time for reading. (4.5)	• SOL'S • The student will participate in a variety of literary experiences which develop an enjoyment and appreciation of literature. (LO 2.19) • The student will participate in visual, auditory tactile, and kinesthetic experiences which enhance language development. (LO 2.22) • The student will develop an awareness and appreciation of different literary styles. (LO 4.16)	• reading a wide variety of fiction and nonfiction selections • reading a wide variety of chapter books and juvenile non-fiction	• The student will acquire experiences necessary for language development and thinking. (2.16) • The student will be introduced to various types of reading material on a variety of subjects. (3.6) • The student will choose to read various types of material on a variety of subjects. (3.7) • The student will acquire experiences necessary for growth in language and thinking. (4.4) • The student will use leisure time for reading. (4.7)
Interpersonal Skills	• The student will produce clearly the basic speech sounds. (2.1) • The student will communicate ideas, concepts, and feelings through creative dramatics. (2.3) • The student will share personal experiences and feelings in writing. (2.13) • The student will tell and write simple personal data. (2.16)	• SOL'S	• reading orally with appropriate expression • initiating, maintaining, and terminating conversation in socially appropriate ways • requesting attention, objects, actions, information, and assistance • conversing about a variety of topics • participating in small group/class discussions • speaking before the whole class	• The student will communicate effectively in conversation with others and in classroom discussions. (2.1) • The student will communicate ideas, concepts, and feelings through creative dramatics. (2.2) • The student will share personal experiences and feelings through writing process activities. (2.11)

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BLUE RIDGE ASSESSMENT PROJECT

Language Arts	*Virginia SOL'S*	*Harrisonburg*	*Albemarle*	*Orange*
	• The student will participate in storytelling and choral reading. (3.1) • The student will paraphrase oral communication. (3.2) • The student will participate effectively in informal classroom discussions. (4.1) • The student will demonstrate effective listening skills. (4.2) • The student will give orally and in writing clear, understandable directions and explanations. (4.14)		• reporting news, observations, information • adapting language for context and audience • format of personal letters • making oral reports • expanding knowledge of idioms, figures of speech, and common expressions	• The student will participate in storytelling and choral reading. (3.1) • The student will paraphrase oral communication. (3.2) • The student will participate effectively in informal classroom discussions. (4.1) • The student will demonstrate effective listening strategies. (4.2) • The student will give orally and in writing clear, understandable directions and explanations. (4.17)
Personal Knowledge	• The student will communicate ideas, concepts, and feelings through creative dramatics. (2.3) • The student will share personal experiences and feelings in writing. (2.13) • The student will tell and write simple personal data. (2.16) • The student will recreate sensory experiences. (3.14)	• SOL'S	• using electronic information resources	• The student will communicate ideas, concepts, and feelings through creative dramatics. (2.2) • The student will share personal experiences and feelings through writing process activities. (2.11) • The student will acquire experiences necessary for language development and thinking. (2.16) • The student will draw on sensory experiences for oral and written communication. (3.17) • The student will acquire experiences necessary for growth in language and thinking. (4.4)
Process Skills	• The student will produce clearly the basic speech sounds. (2.1) • The student will follow multi-step oral and written instructions. (2.2) • The student will prepare for effective reading. (2.4) • The student will increase listening, speaking, reading, and writing vocabularies. (2.8) • The student will read and spell words using word attack skills. (2.10) • The student will write manuscript letters, words, and numerals legibly and correctly from memory. (2.12) • The student will expand basic sentence patterns. (2.14)	• SOL'S • The student will express self in sentences. (LO 2.18) • The student will practice correct cursive letter formation while developing a legible style. (LO 4.17) • The student will increase vocabulary through reading, writing, speaking, and listening experiences. (LO 4.18)	• reading silently • developing vocabulary • writing in complete sentences • introducing agreement of subjects and verbs • forming legible manuscript letters • using the keyboard of computer • using all basic verb tenses appropriately • using plurals, pronouns, negatives, interrogatives, and possessives • increasing in maturity of vocabulary used • understanding and using academic vocabulary • using vocabulary in specific and flexible ways	• The student will use prereading strategies. (2.3) • The student will increase vocabularies for varied purposes. (2.7) • The student will read and spell words using decoding and encoding strategies. (2.8) • The student will be provided with a wide variety of activities to promote the continued development of motor skills towards the formation of legible manuscript letters, words, and numerals from memory. (2.10) • The student will develop a vocabulary useful for learning and responding to instructional content and experiences. (2.15)

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BLUE RIDGE ASSESSMENT PROJECT

Language Arts	*Virginia SOL'S*	*Harrisonburg*	*Albemarle*	*Orange*
	• The student will participate in storytelling and choral reading. (3.1) • The student will paraphrase oral communication. (3.2) • The student will read independently with comprehension. (3.3) • The student will find the main idea when it is stated in a reading selection. (3.4) • The student will use word attack skills to read and understand the meanings of words. (3.6) • The student will write legibly and correctly in cursive style when appropriate. (3.7) • The student will develop basic sentences into interrogative, imperative, and declarative forms. (3.13) • The student will demonstrate effective listening skills. (4.2) • The student will identify details which support the stated main idea of a paragraph. (4.3) • The student will use context clues to aid comprehension. (4.6)		• using negation in appropriate ways • using language appropriate to the context • concepts of synonyms, antonyms • differentiating between synonyms • recognizing antonyms • expanding knowledge of idioms, figures of speech and common expressions • hypothesizing, confirming hypotheses, self-monitoring understanding; self-correcting miscues • extending speaking and reading vocabulary • using capitalization: first word of sentences, names of people and pets, and the pronoun I • using terminal punctuation: periods • writing legibly in manuscript and cursive • understanding and using academic vocabulary encountered in school • distinguishing between fiction and nonfiction • paraphrasing • attending to unfamiliar terms and concepts	• The student will participate in storytelling and choral reading. (3.1) • The student will paraphrase oral communication. (3.2) • The student will use prereading strategies. (3.3) • The student will read independently with comprehension at his/her independent level. (3.4) • The student will find the main idea when it is stated in a reading selection. (3.5) • The student will use decoding strategies to read and understand the meanings of words. (3.8) • The student will understand the function of a paragraph. (3.9) • The student will write legibly and correctly in cursive style. (3.10) • The student will develop a vocabulary useful for learning and responding to instructional content and experiences. (3.16) • The student will demonstrate effective listening strategies. (4.2) • The student will use prereading strategies. (4.3) • The student will identify details which support the main idea of a paragraph. (4.5) • The student will use context clues to aid comprehension. (4.8)
Research Skills	• The student will find and use factual information in reading. (2.5) • The student will understand the function of a paragraph. (2.9) • The student will use beginning reference skills. (2.17) • The student will use textbook aids and reference sources to locate information. (3.10) • The student will distinguish between fact and opinion in a reading selection. (4.4) • The student will distinguish between fiction and nonfiction. (4.8)	• SOL'S	• reference sources • using school library to find books and information • using library systems and resources • introducing research process • using pictures, captions, heading and subheadings, table of contents, and index to facilitate location of information and comprehension of nonfiction • using nonfiction to find information and to answer questions • using research process	• The student will find inferential and factual information in a reading selection. (2.6) • The student will use beginning reference skills. (2.14) • The student will use textbook aids and reference sources to locate information. (3.13) • The student will distinguish between fact and opinion in a reading selection. (4.6) • The student will read and distinguish between fiction and nonfiction in content areas. (4.10)

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BLUE RIDGE ASSESSMENT PROJECT

Language Arts	***Virginia SOL'S***	***Harrisonburg***	***Albemarle***	***Orange***
	• The student will use the dictionary and glossary to obtain information about the spelling, meaning, and pronunciation of words. (4.15)		• introducing telecommunications • introducing copyright regulations • scanning for specific information • using the dictionary for pronunciation, word meanings, spelling • using reference sources to answer questions and pursue interests • using telecommunications • honoring copyright regulations • understanding plagiarism	• The student will use the dictionary and glossary to obtain information about the spelling, meaning, and pronunciation of words. (4.18)
Story Concepts	• The student will identify the sequence of events. (2.6) • The student will predict story outcomes. (2.7) • The student will recognize emotional reactions and motives of story characters. (2.11) • The student will write brief fictional and nonfictional narratives. (3.9) • The student will recreate sensory experiences. (3.14) • The student will identify and describe the setting, characters, and plot in stories. (4.9)	• SOL'S	• Genre--tall tales, fantastic stories, folk tales (noodlehead stories) • Notable Literary Works--*Arrow to the Sun* (McDermott), *Bringing the Rain To Kapiti Plain* (Aardema), *Charlottes' Web* (White), *Lon Po Po* (Young), *Paul Bunyan* (Kellogg), *Sing a Song of Popcorn* (deRegniers), *Sylvester and the Magic Pebble* (Steig) • Literary Elements--plot, characters, setting • Genre--historical fiction, mystery, folk tales (pourquoi stories) • Notable Literary Works--*Follow the Drinking Gourd* (Winter), *Honey I Love* (Greenfield), *Jumanju* (Van Allsburg), *Many Moons* (Thurber/illus. Simont), *Sarah Plain and Tall* (MacLachlan), *Stone Fox* (Gardiner), *Why Mosquitoes Buzz in People's Ears* (Aardema)' • Literary Elements--plot, characters, setting point of view, theme • Genre--realistic fiction, biography, informational materials (variety of types • Notable Literary Works--*Double Life of Pocahontas* (Fritz), *Joyful Noise* (Fleishman), *Misty of Chincoteague* (Henry), *The People Could Fly* (Hamilton), *Shiloh* (Lowry) • Literary Elements--plot, characters, setting, point of view, theme • ascertaining word boundaries	• The student will predict story outcomes. (2.4) • The student will identify the sequence of events. (2.5) • The student will recognize emotional reactions and motives of story characters (2.9) • The student will identify and describe the setting, characters, and plot in stories. (4.11)

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BLUE RIDGE ASSESSMENT PROJECT

Language Arts	*Virginia SOL'S*	*Harrisonburg*	*Albemarle*	*Orange*
Word Study	• The student will increase listening, speaking, reading, and writing vocabularies. (2.8) • The student will read and spell words using word attack skills. (2.10) • The student will use beginning reference skills. (2.17) • The student will use word attack skills to read and understand the meanings of words. (3.6) • The student will use the dictionary and glossary to obtain information about the spelling, meaning, and pronunciation of words. (4.15)	• SOL'S • The student will increase vocabulary through reading, writing, speaking, and listening experiences. (LO 4.18)	• segmenting words into syllables and phonemes • blending and manipulating sounds • consonant digraphs (ex:phone, shop, chip, squeeze, which, long, wish, with, hatch) • silent consonants (ex: bomb, knife) • nasals before consonants (ex: bump, pink) • long vowel markers, vowel digraphs (ex: vote, boat, wait, may) • r-controlled vowels (ex: sharp, shore) • homophones (ex: steak, stake; to, too, two) • diphthongs (ex: ou, oi, aw, etc.) • "i" before "e" rule and its conceptions • common inflectional endings (ex: -s, -ed, -ing) • compound words • common roots, prefixes, and suffixes • learning histories behind words • recognizing and forming compound words • identifying and using common roots, prefixes, and suffixes as clues to meanings of words • categorizing words by semantic, phonetic, or other relationships • playing with words • differentiating parts of compound words • using more sophisticated verb tenses (past perfect, present prefect) appropriately • using plurals, pronouns, negatives, interrogatives, and possessives • decoding of multisyllabic words • consonant doubling conventions at the juncture of syllables of multisyllabic words • rules concerning dropping of "e" when adding endings • rules concerning changing of "y" to "i" when adding endings • structural analysis: compound words, root words, base words	• The student will increase vocabularies for varied purposes. (2.7) • The student will read and spell words using decoding and encoding strategies. (2.8) • The student will use beginning reference skills. (2.14) • The student will develop a vocabulary useful for learning and responding to instructional content and experiences. (2.15) • The student will use decoding strategies to read and understand the meanings of words. (3.8) • The student will develop a vocabulary useful for learning and responding to instructional content and experiences. (3.16) • The student will develop a vocabulary useful for learning and responding to instructional content and experiences. (4.15) • The student will use the dictionary and glossary to obtain information about the spelling, meaning, and pronunciation of words. (4.18)

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BLUE RIDGE ASSESSMENT PROJECT

Language Arts	*Virginia SOL'S*	*Harrisonburg*	*Albemarle*	*Orange*
			• vowel patterns in unstressed syllables (examples: fossil, table) • schwa sound in unstressed syllables (examples: separate, eaten, medicine, button)	
Writing Process	• The student will increase listening, speaking, reading, and writing vocabularies. (2.8) • The student will understand the function of a paragraph. (2.9) • The student will expand basic sentence patterns. (2.14) • The student will understand how purpose and audience affect writing. (2.15) • The student will find the main idea when it is stated in a reading selection. (3.4) • The student will revise written work. (3.8) • The student will write brief fictional and nonfictional narratives. (3.9) • The student will begin using revision and editing skills by experimenting with sentences. (3.11) • The student will develop basic sentences into interrogative, imperative, and declarative forms. (3.13) • The student will recreate sensory experiences. (3.14) • The student will identify details which support the stated main idea of a paragraph. (4.3) • The student will distinguish between fiction and nonfiction. (4.8) • The student will use the writing process to develop paragraphs. (4.10) • The student will revise writing to form compound sentences when appropriate. (4.11) • The student will edit and proofread written work. (4.12)	• SOL'S • The student will begin to use the writing process. (LO 2.21) • The student will develop an awareness and appreciation of different literary styles. (LO 4.16)	• examining models of different types of writing • writing notes, journals, pattern stories, fantastic stores, personal narratives, poetry, letters, reports • introducing writing for specific audiences: teacher, peers, parents, public • prewriting strategies (ex: brainstorming, drawing, discussing, collaboration) • revising: considering ideas suggested by others, making minor additions and deletions, reorganizing information with help • editing with support for capitalization, punctuation, and spelling concepts taught • focusing on a central idea • introducing organization of writing: introduction, body, conclusion • using capitalization: first word of sentences, names of people and pets, and the pronoun I • using terminal punctuation: periods • reorganizing and producing rhymes, alliteration • forming simple, compound, and complex sentences • using more sophisticated verb tenses (past perfect, present perfect) appropriately • using plurals, pronouns, negatives, interrogatives, and possessives • writing notes, journals, personal narratives, poetry, stories, letters, memos, reports; answering questions, giving directions • emphasizing writing for specific audiences	• The student will share personal experiences and feelings through writing process activities. (2.11) • The student will expand basic sentence patterns. (2.12) • The student will develop a vocabulary useful for learning and responding to instructional content and experiences. (2.15) • The student will find the main idea when it is stated in a reading selection. (3.5) • The student will understand the function of a paragraph. (3.9) • The student will revise written work. (3.11) • The student will write brief fictional and nonfictional narratives. (3.12) • The student will begin using revision and editing skills by experimenting with sentences. (3.14) • The student will draw on sensory experiences for oral and written communication. (3.17) • The student will identify details which support the stated main idea of a paragraph. (4.5) • The student will distinguish between fact and opinion in a reading selection. (4.6) • The student will develop basic sentences into interrogative, imperative, exclamatory and declarative forms. (4.12) • The student will use the writing process to develop a paragraph. (4.13) • The student will edit and proofread written work. (4.14)

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Language Arts	***Virginia SOL'S***	***Harrisonburg***	***Albemarle***	***Orange***
	• The student will vary written and oral communications according to purpose and audience. (4.13) • The student will give orally and in writing clear, understandable directions and explanations. (4.14)		• practicing a variety of prewriting strategies • drafting using a computer or word processor • revising • editing for usage and mechanics • organizing paragraphs • using dialogue • using interesting vocabulary • combining sentences • introducing parts of speech: nouns, verbs, pronouns, adjectives, adverbs, prepositions • emphasizing agreement of subjects and verbs • using capitalization conventions: names of days of week, months, holidays, places, books; initials • using punctuation: question marks, exclamation marks, commas in series, quotation marks in dialogue, punctuation of dates, city and state, names of books • embedding/conjoining in sentence structure	• The student will vary written and oral communications according to purpose and audience. (4.16) • The student will give orally and in writing clear, understandable directions and explanations. (4.17)

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BLUE RIDGE ASSESSMENT PROJECT

National Council of Teachers of Mathematics Standards (NCTM)	***Virginia Standards of Learning (SOL)***	***Albemarle***	***Harrisonburg***	***Orange***
Mathematics as Problem Solving	• The student will determine, by counting, the value of a collection of pennies, nickels, and dimes - whose whole total value is 100¢ or less. (2.16)* • The student will solve simple problems containing both words and pictures. (2.20) • The student will determine, by counting, the value of a collection of coins (pennies, nickels, dimes, quarters, and half-dollars) - whose total is one dollar or less. (3.11)* • The student, given a collection of money, will select coins and one dollar bill(s) which could be used to pay for a specific purchase. (3.12)* • The student will solve one-step word problems requiring the use of addition or subtraction. (3.20) • The student will solve "non-routine" problems. (3.21) • The student will determine the value of a collection of money which has a total value of less than $10.00. (4.18) • The student will solve one-step problems involving addition, subtraction, and multiplication. (4.22) • The student will solve "non-routine problems. (4.24)	• Students will select the appropriate strategy to solve a problem: estimation, mental arithmetic, calculator, pencil and paper, or computer. (2.16) • Students will count money up to $1.00. (2.17) • Students will solve problems in science that require the use of measurement. (2.29) • Students will solve problems using data from a graph. • Students will solve multi-step addition and/or subtraction problems. (3.10) • Students will count money up to $5.00. (3.24) • Students, given a specific amount of money, will estimate to determine if a purchase can be made. (3.25) • Students will solve problems involving the receipt of change. (3.26) • Students will solve problems using data from a graph. (3.45) • Students will solve multi-step addition and/or subtraction problems. (4.07) • Students will solve multi-step problems involving multiplication and division. (4.11) • Students will solve multi-step and non-routine problems with money. (4.19) • Students will solve problems involving the viewing of 3-dimensional objects from different perspectives. (4.32)	• The students will use numbers within realistic word problems. (2.3) • The students will use addition and subtraction to solve word problems. (2.30) • The student will be able to count and appropriately select money, tell time, and determine temperature and length in both metric and standard systems. (3.5) • The student will recognize and use problem solving strategies with graphs and one step and non-routine problems. (3.7) • The student will be able to find the sum of two whole numbers, each 9999 or less, with or without regrouping, as well as solve one step word problems involving addition. (4.3)* • The student will be able to find the difference between two whole numbers, each 999 or less, with or without regrouping, as well as solving one step word problems involving subtraction. (4.4)* • The student will be able to find the product of two whole numbers, one factor 999 or less, and a second factor 9 or less with regrouping, as well as one step word problems involving multiplication. (4.5)*	• The student will expand his/her comparison skills to include measurement. (2.5)* • The student will participate in a wide variety of activities to promote the continued development of problem solving strategies. (2.7)* • The student will continue to develop his/her comparison skills by participating in a variety of activities involving measurement. (3.5)* • The student will apply a variety of strategies to solve one-step and non-routine problems. (3.7) • The student will investigate and use measurement as a means of problem solving. (4.6)* • The student will apply a variety of strategies to solve multi-step and non-routine problems. (4.8)
Mathematics as Communication	• The student will read and write numerals 0 through 999. (2.03) • The student will compare the numerical values of two whole numbers between 0 and 99 by identifying one as greater than, less than, or equal to the other. (2.05)*	• Student will write a two digit number from a concrete or graphic representation. (2.1) • Students will read, write, and identify numbers through 999. (2.4)	• The students will read, write, and complete a sequence of numbers from 0-999. (2.1) • The student will be able to compare whole numbers (0-99) and identify one as greater than, less than, or equal to the other. (2.5)	• The student will expand his/her knowledge of number concepts. (2.1)* • The student will demonstrate an understanding of geometric concepts. (2.3)

*** Included under more than one category!**

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BLUE RIDGE ASSESSMENT PROJECT

NCTM	***VA SOL'S***	***Albemarle***	***Harrisonburg***	***Orange***
	• Students will use the concept of place value to justify whether a given number is greater than, less than, or equal to another number. (2.3) • Students will use the symbols <, >, or = to compare numbers. (2.5) • Students will identify pennies, nickels, dimes, quarters (half dollars). (2.18) • The student, given an appropriate drawing or concrete object, will identify the parts or regions that represent one-half, one-third, and one-fourth, and will write the corresponding symbols. (2.11)* • The student will compare the weight of two objects, using a balance scale and tell which is heavier or lighter. (2.14)* • The student will identify pennies, nickels, dimes, quarters, half-dollars, and dollar bills. (2.15) • The student will tell time to the half hour. (2.17)* • The student will compare two whole numbers between 0 and 999 by identifying one as greater than, less than, or equal to the other. (3.02)* • Students will read, write, and identify numbers through 9,999. (3.02) • Students will use the symbols <, >, or = to compare numbers. (3.03) • The student will describe triangles, squares, and rectangles by naming the number of sides, the number of corners, and the number of square corners. (3.16)* • The student, given appropriate drawings, will identify open and closed figures. (3.17)* • Students will use the symbols $, ¢, and decimal point in representing money. (3.27)	• Use the concept of place value to justify whether a given number is greater than, less than, or equal to another number. (3.01) • Student will use concept of place value to justify whether a given number is greater than, less than, or equal to another. (4.01)	• The students will compare the weight of two objects using a balance scale to find which is heavier/lighter. (2.14) • The students will be able to tell time to the half hour. (2.21) • The students will write the symbols that correspond with halves, thirds, and fourths. (2.34) • The students will be able to identify pennies, nickels, quarters, half-dollars, and dollar bills. (2.36) • The students will be able to count collections of coins and determine the value as greater than or less than. (2.39) • The student will be able to identify the place value of a 4-digit number and compare and sequence the numbers. (3.1) • The students will identify, describe, and use manipulatives to demonstrate their understanding of geometric concepts, shapes, figures, and angles. (3.6) • The student will be able to identify place value for each digit in a six digit numeral and compare two whole numbers between 0 and 9,999 by identifying one as greater than, less than, or equal to the other. (4.1)*	• The student will continue to develop a vocabulary useful for learning and responding to instructional content and experience. (2.4) • The student will participate in a wide variety of activities to promote the continued development of motor skills, working toward the combination of legible numerals and symbols. (2.8) • The student will expand his/her knowledge of place value. (3.2)* • The student will continue to develop and use math language in oral/written forms. (3.4) • The student will expand the concept of place value to include decimal and fractional parts. (4.2)* • The student will continue to develop and use mathematical language in oral and written forms. (4.5)

*** Included under more than one category!**

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NCTM	***VA SOL'S***	***Albemarle***	***Harrisonburg***	***Orange***
	• Students will describe the relationships among feet, inches, yards. (3.29) • Students will describe the relationship among metric units of length. (3.30) • The student will compare 2 whole numbers between 0 and 9,999 by identifying one as greater than, less than, or equal to the other. (4.02) • Student will write and identify decimals through hundredths. (4.22) • Students will describe the relationship among feet, inches, yards, and miles. (4.23) • Students will describe the relationships among metric units of length. (4.24) • Students will describe two dimensional shapes using appropriate terminology. (4.28)			
Mathematics as Reasoning	• The student will count by 2's and 5's from 0 to 100. (2.02)* • The student will complete a sequence of ten or fewer consecutive whole numbers between 0 and 99. (2.04)* • The student will compare the numerical values to two whole numbers between 0 and 99 by identifying one as greater than, less than, or equal to the other. (2.05)* • The student will compare two whole numbers between 0 and 999 by identifying as greater than, less than, or equal to the other (3.02)* • The student will complete a sequence of ten or fewer consecutive whole numbers between 0 and 500. (3.03)* • The student will compare 2 whole numbers between 0 and 9,999 by identifying one as greater than, less than, or equal to the other. (4.02)	• Students will select the appropriate unit of measure for a given situation. (2.23) • Students will use the concept of place value to justify whether a given number is greater than, less than, or equal to another number. (2.3) • Students will use the symbols <, >, or = to compare numbers. (2.5) • Students will count by 2's (evens and odds), fives, and threes. (2.6) • Students will compare even and odd numbers. (2.7) Use the concept of place value to justify whether a given number is greater than, less than, or equal to another number (3.01) • Students will use the symbols <, >, or = to compare numbers. (3.03) • Students will count by 4's, 6's, 7's, 8's, 9's, etc. (3.04) • Students will compare even and odd numbers. (3.05)	• The students will read, write, and complete a sequence of numbers from 0-999. (2.1) • The students will be able to count collections of coins and determine the value as greater than or less than. (2.39) • The student will be able to compare whole numbers (0-99) and identify one as greater than, less than, or equal to the other. (2.5) • The students will count by 2's, 3's, 5,s, and 10's from 0-100. (2.7) • The student will be able to identify the place value for a 4-digit number and compare and sequence the numbers. (3.1) • The student will be able to identify place value for each digit in a six digit numeral and compare two whole numbers between 0 and 9,999 by identifying one as greater than, less than, or equal to the other. (4.1)*	• The student will expand his/her knowledge of number concepts. (2.1)* • The student will demonstrate an understanding of geometric concepts. (2.3)* • The student will expand his/her knowledge of place value. (3.2)* • The student will expand the concept of place value to include decimal and fractional parts. (4.2)*

*** Included under more than one category!**

Note: Rockingham, Fluvanna, and Greene Counties use VA. SOL'S as their curriculum guide in Mathematics.

BLUE RIDGE ASSESSMENT PROJECT

NCTM	*VA SOL'S*	*Albemarle*	*Harrisonburg*	*Orange*
		• Student will use concept of place value to justify whether a given number is greater than, less than, or equal to another. (4.01) • Students will compare and contrast picture, bar, and line graphs. (4.47)		
Mathematical Connections	• The student will use a ruler to make simple linear measurements in centimeters and inches. (2.12)* • The student will determine, by counting, the value of a collection of pennies, nickels, and dimes - whose total value is 100¢ or less. (2.16)* • The student will tell time to the half-hour. (2.17)* • The student will measure length in inches, feet, and yards. (3.09) • The student will measure length in centimeters and meters. (3.10) • The student will determine by counting the value of a collection of coins (pennies, nickels, dimes, quarters, and half-dollars) whose total is one dollar or less. (3.11)* • The student, given a collection of money, will select coins and one dollar bill(s) which could be used to pay for specific purchase. (3.12)* • The student will tell time in multiples of 5 minutes. (3.13)* • The student will identify equivalent periods of time. (3.14)* • The student will read temperature from a Celsius and a Fahrenheit thermometer to the nearest 10° marking. (3.15)* • The student will estimate whole number sums and differences. (4.04) • The student will measure length using metric and U.S. customary units. (4.16)	• Students will count money up to $1.00. (2.17) • Students, given a specific amount of money, will estimate to determine if a purchase can be made. (2.19) • Students will explore lines of symmetry in real world examples. (2.26) • Students will recognize an appreciate the use of geometry in art, nature, and architecture. (2.28) • Students will solve problems in science that require the use of measurement. (2.29) • Students will read a clock to hours and half hours. (2.30) • Students will read A clock to quarter hour. (2.31) • Students will state real world events using the terms yesterday, today, and tomorrow. (2.31) • Students will compare time on digital and standard clocks. (2.32) • Students will explore statistics in real world situations. (2.33) • Students will explore fractions in real world situations (measurement). (3.06) • Students will count money up to $5.00. (3.24) • Students, given a specific amount of money, will estimate to determine if a purchase can be made. (3.25) • Students will solve problems involving the receipt of change. (3.26) • Students will use the symbols $, ¢, and decimal point in representing money. (3.27) • Students will determine length to the nearest centimeter. (3.28) • Students will read a thermometer in Fahrenheit and Celsius. (3.31)	• The student will measure objects in centimeters using a ruler. (2.11) • The students will measure objects in inches using a ruler. (2.12) • The students will estimate the length of objects in centimeters or inches. (2.13) • The students will use the standard cooking measurements of cups and teaspoons. (2.19) • The students will be able to tell time to the half hour. (2.21) • The students will use the measurement of time in their daily routines. (2.22) • The students will use a calendar to find the date. (2.23) • The students will identify the days of the week (in order), including the use of yesterday, today, and tomorrow. (2.24) • The students will identify the months of the year (in order). (2.25) • The students will be able to count a collection of pennies, nickels, and dimes to determine the value. (2.37) • The students will use money to buy items and count correct change. (2.40) • The students will be able to count and appropriately select money, tell time, and determine temperature and length, both in metric and standard systems. (3.5) • The student will be able to round a two-digit whole number to the nearest ten in order to estimate sums and differences. (4.2)* • The student will be able to read, write, add, and subtract decimals expressed as tenths and determine the value of a collection of money with a total value of less than $10.00. (4.7)*	• The student will continue to develop his/her comparison skills by participating in a variety of activities involving measurement. (3.5)* • The student will develop and apply the concept of regrouping in addition, subtraction, and multiplication. (4.1)* • The student will investigate and use measurement as a means of problem solving. (4.6)

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BLUE RIDGE ASSESSMENT PROJECT

NCTM	*VA SOL'S*	*Albemarle*	*Harrisonburg*	*Orange*
	• The student will determine the value of a collection of money which has a total value of less than $10.00. (4.18) • The student will tell time to the nearest minute (4.19)	• Students will select the appropriate unit of measure for a given situation. (3.32) • Student will use a ruler to measure line segments to the nearest 1/2 or 1/4 inch. (3.33) • Students will discover lines of symmetry in ordinary objects. (3.36) • Students will discover parallel/perpendicular lines in real world situations. (3.37) • Students will recognize and appreciate the use of geometry in art, nature, architecture. (3.39) • Students will solve problems in science that require the use of measurement. (3.40) • Students will read a clock to quarter hours. (3.41) • Students will read a clock to the nearest minute. (3.42) • Students will explore statistics in real world situations. (3.44) • Students will explore fractions in real world situations. (4.03) • Students, given a specific amount of money, will estimate to determine if a purchase can be made. (4.17) • Students will solve problems involving the receipt of change. (4.18) • Students will solve multi-step and non-routine problems with money. (4.19) • Students will select the appropriate unit of measure for a given situation. (4.25) • Students will use a ruler to measure line segments to the nearest 1/2 or 1/4 inch. (4.26) • Students will discover examples of types of angles in real world situations. (4.30) • Students will discover parallel and perpendicular lines in real world situations. (4.31) • Students will recognize and appreciate the use of geometry in art, nature, architecture. (4.34)	• The student will be able to tell time to the nearest minute. (4.9) • The student will be able to measure length and liquid volume using metric and U.S. customary units. (4.10)	

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BLUE RIDGE ASSESSMENT PROJECT

NCTM	***VA SOL'S***	***Albemarle***	***Harrisonburg***	***Orange***
		• Students will solve problems in science that require use of measurement. (4.35) • Students will read a clock to the nearest minute. (4.36) • Students will explore statistics in real world situations. (4.41)		
Estimation	• The student will estimate whole number sums and differences. (4.04)	• Students will use estimation to determine the reasonableness of results to computation. (2.15) • Students, given a specific amount of money, will estimate to determine if a purchase can be made. (2.19) • Students will estimate and measure length to the nearest inch. (2.20) • Students will estimate and measure length to the nearest centimeter. (2.21) • Students, given a specific amount of money, will estimate to determine if a purchase can be made. (3.25) • Students will estimate linear weight and volume. • Students will estimate the amount of time. (3.43) • Students will use estimation to determine the reasonableness of results to computation. (4.08) • Students, given a specific amount of money, will estimate to determine if a purchase can be made. (4.17) • Students will estimate the amount of time taken to complete a task. (4.39)	• The students will estimate the length of objects in centimeters or inches. (2.13) • The student will estimate the weight of objects in kilograms or pounds. (2.15) • The student will estimate the liquid volume of a container in liters or gallons. (2.18) • The students will estimate the length of distances in kilometers or miles. (2.20) • Student will round a two-digit whole number to the nearest ten in order to estimate sums and differences. (4.2)*	• The student will interpret statistical data. (2.6)* • The student will continue to interpret statistical data and represent data in visual form. (3.6)* • The student will develop and apply the concept of regrouping in addition, subtraction, and multiplication. (4.1)*
Number Sense and Numeration	• The student will determine the place value for each digit in a three-digit numeral. (2.01) • The student will count by 2's and 5's from 0 to 100. (2.02)* • The student will compare the numerical values of two whole numbers between 0 and 99 by identifying one as greater than, less than, or equal to the other. (2.05)* • The student, given an ordered set of objects, will identify the position sixth to tenth. (2.06)*	• Students will write a two-digit number from a concrete or graphic representation. (2.1) • Students will demonstrate an understanding of place value by using a model to represent numbers up to 100. (2.2) • Students will use the concept of place value to justify whether a given number is greater than, less than, or equal to another. (2.3)	• The student will be able to identify ordinal numbers from 1-20. (2.2) • The student will identify place value in three-digit numerals. (2.4) • The student will be able to compare whole numbers (0-99) and identify one as greater than, less than, or equal to the other. (2.5) • The student will count by 2's, 3's, 5's, and 10's from 1-100. • The students will identify numbers as odd or even. (2.8)	• The student will expand his/her knowledge of number concepts. (2.1)* • The student will apply his/her knowledge of number concepts towards developing an understanding of place value. (2.2)* • The student will expand his/her comparison skills to include measurement. (2.5)* • The student will expand his/her knowledge of place value. (3.2)*

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BLUE RIDGE ASSESSMENT PROJECT

NCTM	***VA SOL'S***	***Albemarle***	***Harrisonburg***	***Orange***
	• The student will use numeration models to indicate the sum of two or three whole numbers - whose sum is 29 or less, with regrouping. (2.08)* • The student, given rectangular stacks of cubic units, will count the number of cubes in the stack. (2.13)* • The student will compare the weight of two objects using a balance scale and tell which is heavier or lighter. (2.14)* • The student will determine, by counting, the value of a collection of pennies, nickels, and dimes - whose total value is 100¢ or less. (2.16)* • The student will identify the place value for each digit in a four-digit numeral. (3.01) • The student will compare two whole numbers between 0 and 999 by identifying one as greater than, less than, or equal to the other. (3.02)* • The student will determine, by counting, the value of a collection of coins (pennies, nickels, dimes, quarters, and half dollars), whose total is one dollar or less. (3.11)* • The student, given a collection of money, will select coins and one dollar bill(s) which could be used to pay for specific purchase. (3.12)* • The student will identify the place value for each digit in a six digit numeral. (4.01) • The student will compare two whole numbers between 0 and 9,999 by identifying one as greater than, less than, or equal to the other. (4.02) • The student will round a whole number, 99 or less, to the nearest tenth. (4.03) • The student will read and write decimals expressed as tenths. (4.11)	• Students, given a specific amount of money, will estimate to determine if a purchase can be made. (2.19) • Students will estimate and measure length to the nearest inch. (2.20) • Students will estimate and measure length to the nearest centimeter. (2.21) • Students will use the concept of place value to justify whether a given number is greater than, less than, or equal to another number. (3.01) • Students will use the symbols <, >, = to compare numbers. (3.03) • Students will count by 4's, 6's, 7's, 8's, 9's. (3.04) • Students will explore the relationship between multiplication and division. (3.23) • Students will count money up to $5.00. (3.24) • Students will use concept of place value to justify whether a given number is greater than, less than, or equal to another. (4.01) • Students will demonstrate an understanding of place value by using a model to represent numbers through 999,999. (4.02) • Students will explore relationship between multiplication and division. (4.15) • Students, given a specific amount of money, will estimate to determine if a purchase can be made. (4.17) • Students will estimate the amount of time it will take to complete a task. (4.39)	• The students will identify the whole numbers that belong before or after any given number and between any two numbers. (2.9) • The student will compare the weight of two objects using a balance scale to find which is heavier/lighter. (2.14) • The students will count the number of cubes in a rectangular stack of cubic units. (2.16) • The students will be able to count a collection of pennies, nickels, and dimes to determine the value. (2.37) • The students will be able to count collections of coins and determine the value as greater than or less than. (2.39) • The student will be able to identify the place value for a 4-digit number and compare and sequence the numbers. (3.1) • The students will be able to count and appropriately select money, tell time, and determine temperature and length in both metric and standard systems. (3.5) • The student will be able to identify place value for each digit in a six digit numeral and compare two whole numbers between 0 and 9,999 by identifying one as greater than, less than, or equal to the other. (4.1)* • The student will round a two-digit whole number to the nearest ten in order to estimate sums and differences. (4.2)* • The student will be able to read, write, add, and subtract decimals expressed as tenths and determine the value of a collection of money less than $10.00. (4.7)*	• The student will continue to develop his/her comparison skills by participating in a variety of activities involving measurement. (3.5)* • The student will develop and apply the concept of regrouping in addition, subtraction, and multiplication. (4.1)* • The student will expand the concept of place value to include decimal and fractional parts. (4.2)* • The student will investigate and use measurement as a means of problem solving. (4.6)*

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BLUE RIDGE ASSESSMENT PROJECT

NCTM	***VA SOL'S***	***Albemarle***	***Harrisonburg***	***Orange***
	• The student will determine the value of a collection of money which has a total value of less than $10.00. (4.18)			
Concepts of Whole Number Operations	• The student will count by 2's and 5's from 0-100. (2.02)* • The student will complete a sequence of ten or fewer consecutive whole numbers between 0 and 99. (2.04)* • The student will find the sum of two whole numbers, 99 or less, without regrouping. (2.07) • The student will find the difference of two whole numbers, each 99 or less, without regrouping. (2.09) • The student will complete a sequence of ten or fewer consecutive whole numbers between 0 and 500. (3.03)* • The student will find the sum of two whole numbers, each 999 or less, with or without regrouping. (3.04) • The student will find the difference between two whole numbers, each 999 or less, without regrouping. (3.05) • The student will find the product of two numbers involving basic facts through 5x9. (3.06) • The student will find the product of two whole numbers, one factor 99 or less and a second factor 5 or less. (3.07) • The student will find the sum of two whole numbers, each 9,999 or less, with or without regrouping. (4.05) • The student will find the difference between two whole numbers, each 999 or less, with or without regrouping. (4.06) • The student will find the product of two whole numbers involving basic facts through 9x9. (4.07)	• Students will count by 2's (evens and odds), 5's, and 3's. (2.6) • Students will solve simple addition problems. (2.11) • Students will solve simple subtraction problems. (2.12) • Students will count by 4's, 6's, 7's, 8's, 9's. (3.04) • Students will solve multi-step addition and/or subtraction problems. (3.10) • Students will solve simple problems involving subtraction with renaming. (3.13) • Students will demonstrate multiplication as repeated addition. (3.14) • Students will solve simple problems involving multiplication with one digit. (3.19) • Students will solve simple problems involving division with 1-digit divisors. (3.19) • Students will demonstrate mastery of multiplication facts with factors less than or equal to 12. (3.21) • Students will solve multi-step addition and/or subtraction problems. (4.07) • Students will demonstrate multiplication or repeated addition. (4.10) • Students will solve multi-step problems involving multiplication and division. (4.11) • Students will demonstrate mastery of multiplication facts with factors less than or equal to 12. (4.13) • Students will solve simple problems involving division with 2-digit divisors. (4.20)	• The student will be able to read, write, and complete a sequence of numbers from 0-999. (2.1) • The student will use basic multiplication concepts within realistic word problems. (2.10) • The student will find the difference between two whole numbers (999 or less) without regrouping. (2.21) • The students will find the sum of two whole numbers (999 or less) without regrouping. (2.26) • The student will find the sum of two whole numbers (99 or less) with regrouping. (2.28) • The student will find the difference between whole numbers (99 or less) with regrouping. (2.29) • The students will use addition and subtraction to solve word problems. (2.30) • The student will identify the place value for a 4-digit number & compare and sequence the numbers. (3.1) • The students will be able to find sums and differences of two whole numbers with and without regrouping. (3.2) • The students will be able to find the products and quotients of whole numbers up to factors of 99 and the other factors being 9 or less. (3.3) • The student will be able to find the sum of two whole numbers, each 9,999 or less, with or without regrouping, and solve one step word problems involving addition. (4.3)* • The student will be able to find the difference between two whole numbers, each 999 or less, with or without regrouping, as well as solve one step word problems involving subtraction. (4.4)*	• The student will develop and apply the concept of regrouping in addition, subtraction, and multiplication. (4.1)* • The student will expand the concept of place value to include decimal and fractional parts. (4.2)* • The student will explore the concept of division. (4.3) • The student will expand his/her knowledge of number concepts. (2.1)* • The student will apply his/her knowledge of number concepts toward developing an understanding of place value. (2.2)* • The student will expand his/her knowledge of number concepts. (3.1)*

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BLUE RIDGE ASSESSMENT PROJECT

NCTM	***VA SOL'S***	***Albemarle***	***Harrisonburg***	***Orange***
	• The student will find the product of two whole numbers, one factor 999 or less, and a second factor 9 or less with regrouping. (4.08) • The students will find the quotient of two whole numbers involving the basic facts through 81-9. (4.09) • The student will find quotient of two whole numbers and the remainder, given a dividend of two digits or less and a one-digit divisor. (4.10) • The student will add with decimals expressed as tenths. (4.12) • The student will subtract with decimals expressed as tenths. (4.13) • The student will add with fractions having like denominators. (4.14) • The student will subtract with fractions having like denominators. (4.15)		• The student will be able to find the product of two whole numbers, one factor 999 or less and a second factor 4 or less with regrouping, as well as one step word problems involving multiplication. (4.5)* • The student will be able to find the quotient of two whole numbers and the remainder, given a dividend of two digits or less and a one-digit divisor. (4.6) • The student will be able to read, write, add, and subtract decimals expressed as tenths and determine the value of a collection of money less than $10.00. (4.7)* • The student will be able to add and subtract fractions having like denominators. (4.8)	
Whole Number Computation	• The student will use numeration models to indicate the sum of two or three whole numbers whose sum is 29 or less, with regrouping (2.08) • The student will use numeration models to indicate the differences of two whole numbers, each 29 or less, with regrouping. (2.10) • The student will estimate whole-number sums and differences. (4.04) • The student will find the sum of two whole numbers, each 9,999 or less, with or without regrouping. (4.05)	• Students will use calculators to investigate number patterns. (2.10) • Students will use manipulatives to explore, explain, and develop an addition algorithm. (2.13) • Students will use manipulatives to explore, explain, and develop a subtraction algorithm. (2.14) • Students will use estimation to determine the reasonableness of results to computation. (2.15) • Students will select the appropriate strategy to solve a problem: estimation, mental arithmetic, calculator, pencil and paper, or computer. (2.16) • Students will use a calculator to investigate number patterns. (3.09) • Students will use estimation to determine the reasonableness of results to computation. (3.11) • Students will select the appropriate strategy to solve a problem: estimation, mental arithmetic, calculator, pencil and paper, or computer. (3.12)	• Students will be able to round a two-digit whole number to the nearest ten in order to estimate sums and differences. (4.2)* • The student will be able to find the sum of two whole numbers, each 9,999 or less, with or without regrouping, as well as solve one step word problems involving addition. (4.3)*	• The student will expand his/her knowledge of number concepts. (2.1)* • The student will participate in a wide variety of activities to promote the continued development of problem solving strategies. (2.7)* • The student will continue to interpret statistical data and represent data in visual form. (3.6)* • The student will develop and apply the concept of regrouping in addition, subtraction, and multiplication. (4.1)*

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BLUE RIDGE ASSESSMENT PROJECT

NCTM	*VA SOL'S*	*Albemarle*	*Harrisonburg*	*Orange*
		• Students will use manipulatives to explore, explain, and develop a multiplication algorithm and 1-digit multiples. (3.15) • Students will use manipulatives to explore, explain, and discover a division algorithm with 1-digit divisor. (3.16) • Students will demonstrate division as sharing of objects or sets of objects. (3.17) • Students will use manipulatives to develop the concept of remainder in division. (3.20) • Students will use a calculator to investigate number patterns. (4.06) • Students will use estimation to determine the reasonableness of results to computation. (4.08) • Students will select the appropriate strategy to solve a problem: estimation, mental arithmetic, calculator, pencil, or computer. (4.09) • Students will use manipulatives to develop the concept of remainder in division. (4.12)		
Geometry and Spatial Sense 65	• The student will draw a circle, triangle, square, and rectangle (2.18) • The student will describe triangles, squares, and rectangles by naming , the number of sides, the number of corners, and the number of square corners. (3.16)* • The student, given appropriate drawings, will identify open and closed figures. (3.17)* • The student, given an appropriate figure, will identify points, lines, line segments, and angles. (4.20)	• Students will explore simple congruent figures. (2.25) • Students will explore lines of symmetry in real world examples. (2.26) • Students will construct three dimensional structures. (2.27) • Students will recognize and appreciate the use of geometry in art, nature, and architecture. (2.28) • Students will sort, classify, describe, and identify spheres and rectangular solids, and pyramids according to essential attributes. (3.24) • Students will explore lines of symmetry. (3.35) • Students will discover lines of symmetry in ordinary objects. (3.36) • Students will solve simple problems that require drawing congruent figures. (3.38)	• The student will identify and draw these flat shapes: circle, triangle, square, rectangle. (2.31) • The student will identify and draw these solid shapes: sphere, cone, cube, rectangular prism, and cylinder. (2.32) • The students will identify, describe, and use manipulatives to demonstrate their understanding of geometric concepts, shapes, figures, and angles. (3.6) • The student will be able to identify points, lines, line segments, and angles from an appropriate figure. (4.11)	• The student will demonstrate an understanding of geometric concepts. (2.3)* • The student will demonstrate an understanding of geometric concepts. (3.3) • The student will explore geometric relationships. (4.4) 69

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NCTM	*VA SOL'S*	*Albemarle*	*Harrisonburg*	*Orange*
		• Students will recognize and appreciate the use of geometry in art, nature, and architecture. (3.39) • Students will describe two dimensional shapes using appropriate terms. (4.28) • Students will sort, classify, describe, and identify types of angles according to essential attributes. (4.29) • Students will discover examples of types of angles in real world situations. (4.30) • Students will discover parallel and perpendicular lines in real world situations. (4.31) • Students will solve problems involving the viewing of 3 dimensional objects from different perspectives. (4.32) • Students will solve problems that require drawing congruent figures and lines of symmetry. (4.33) • Students will recognize and appreciate the use of geometry in art, nature, architecture. (4.34)		
Measurement	• The student will use a ruler to make simple linear measurements in centimeters and inches. (2.12) • The student, given rectangular stacks of cubic units, will count the number of cubes in stack. (2.13)* • The student will compare weight of two objects using a balance scale and tell which is heavier or lighter. (2.14) • The student will tell time to the half hour. (2.17) • The student will measure length in inches, feet, and yards. (3.09)* • The student will measure length in centimeters and meters. (3.10)* • The student will tell time in multiples of 5 minutes. (3.13)* • The student will identify equivalent periods of time. (3.14)* • The student will read temperature from a Celsius and a Fahrenheit thermometer to the nearest 10° marking. (3.15)*	• Students will estimate and measure length to the nearest inch. (2.20) • Students will estimate and measure length to the nearest centimeter. (2.21) • Students will recognize the need for uniform measurement systems. (2.22) • Students will select the appropriate unit of measure for a given situation. (2.23) • Students will solve problems in science that require the use of measurement. (2.29) • Students will read a clock to hours and half hours. (2.30) • Students will read a clock to quarter hours. (2.31) • Students will state real world events using the terms yesterday, today, and tomorrow. (2.32) • Students will compare time on digital and standard clocks. (2.32) • Students will explore fractions in real world situations such as measurement. (3.06)	• The students will measure objects in centimeters using a ruler. (2.11) • The students will measure objects in inches using a ruler. (2.12) • The students will be able to estimate the length of objects in centimeters or inches. (2.13) • The students will compare the weight of two objects using a balance scale to find which is heavier/lighter. (2.14) • The students will estimate the weight of objects in kilograms or pounds. (2.15) • The students will estimate the liquid volume of a container in liters or gallons. (2.18) • The students will use the standard cooking measurements of cups and teaspoons. (2.19) • The students will estimate the length of distances in kilometers or miles. (2.20) • The students will use the measurement of time in their daily routines. (2.22)	• The student will expand his/her comparison skills to include measurement. (2.5)* • The student will continue to develop his/her comparison skills by participating in a variety of activities involving measurement. (3.5)* • The student will investigate and use measurement as a means of problem solving. (4.6)*

*** Included under more than one category!**

Note: Rockingham, Fluvanna, and Greene Counties use VA. SOL'S as their curriculum guide in Mathematics.

BLUE RIDGE ASSESSMENT PROJECT

NCTM	***VA SOL'S***	***Albemarle***	***Harrisonburg***	***Orange***
	• The student will measure length using metric and U.S. customary units. (4.16) • The student will measure liquid volume using metric and U.S. customary units. (4.17) • The student will tell time to the nearest minute. (4.19)	• Students will read a thermometer in Fahrenheit and Celsius. (3.21) • Students will determine length to the nearest centimeter. (3.28) • Students will describe the relationships among feet, inches, yards, miles. (3.29) • Students will describe the relationships among metric units of length. (3.30) • Students will select the appropriate unit of measurement for a given situation. (3.32) • Students will use a ruler to measure line segments to the nearest 1/2 or 1/4 inch. (3.33) • Students will solve problems in science that require the use of measurement. (3.40) • Students will read a clock to quarter hours. (3.41) • Students will read a clock to the nearest minute. (3.42) • Students will estimate the amount of time. (3.43) • Students will describe the relationships among feet, inches, yards, miles. (4.23) • Students will describe the relationships among metric units of length. (4.24) • Students will use a ruler to measure line segments to the nearest 1/2 or 1/4 inch. (4.26) • Students will investigate area and perimeter. (4.27) • Students will solve problems in science that require the use of measurement. (4.35) • Students will read a clock to the nearest minute. (4.36) • Students will solve simple problems involving the addition and subtraction of time. (4.37) • Students will solve complex problems involving the calendar. (4.38) • Students will estimate the amount of time it will take to complete a task. (4.39)	• The students will use a calendar to find the date. (2.23) • The students will identify the days of the week (in order), including the use of yesterday, today, and tomorrow. (2.24) • The students will identify the months of the year (in order). (2.25) • The students will be able to count and appropriately select money, tell time, and determine temperature and length in both metric and standard systems. (3.5) • The student will be able to tell time to the nearest minute. (4.9) • The student will be able to measure length and liquid volume using metric and U.S. customary units. (4.10)	

• **Included under more than one category!**

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BLUE RIDGE ASSESSMENT PROJECT

NCTM	*VA SOL'S*	*Albemarle*	*Harrisonburg*	*Orange*
		• Students will solve problems involving the addition and subtraction of length. (4.40)		
Statistics and Probability	• The student, given a simple picture or a bar graph, will determine the number represented in each row or column and compare the numbers. (2.19) • The student will read and construct simple bar or picture graphs. (3.18) • The student, given appropriate data, will construct a simple bar or picture graph. (4.21)	• Students will write a two-digit number from a concrete or graphic representation. (2.1) • Students will explore statistics in real world situations. (2.33) • Students will solve problems using data from graph. (2.34) • Students will explore the probability of an event occurring (include probabilities from 1 to 0). (2.35) • Students will explore graphs with units other than one. (2.36) • Students will independently collect simple survey and experiential data. (2.37) • Students will create simple bar graphs. (2.38) • Students will draw conclusions from simple graphs. (2.39) • Students will explore statistics in real world situations. (3.44) • Students will solve problems using data from a graph. (3.45) • Students will analyze probabilities from classroom simulations. (3.46) • Students will explore graphs with units other than one. (3.47) • Students will independently collect simple survey and experimental data. (3.48) • Students will create simple bar graphs. (3.49) • Students will draw conclusions from simple graphs. (3.50) • Students will explore statistics in real world situations. (4.41) • Students will solve problems using data from a graph. (4.42) • Students will analyze probabilities from classroom trials. (4.43) • Students will create and analyze line and bar graphs with units other than one. (4.44)	• The student will interpret a graph or simple picture. (2.17) • The student will recognize and use problem solving strategies with graphs and one step and non routine problems. (3.7) • The student will be able to construct a simple bar graph when given appropriate data. (4.13)	• The student will interpret statistical data. (2.6)* • The student will continue to interpret statistical data and represent data in visual form. (3.6) • The student will collect, interpret, and construct a representation of statistical data. (4.7)*

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BLUE RIDGE ASSESSMENT PROJECT

NCTM	*VA SOL'S*	*Albemarle*	*Harrisonburg*	*Orange*
		• Students will explore circle graphs. (4.45) • Students will independently collect experimental data over a period of time. (4.46) • Students will compare and contrast picture, bar, and line graphs. (4.47)		
Fractions and Decimals	• The student, given an appropriate drawing or concrete object, will identify the parts or regions that represent one-half, one-third, and one-fourth, and write the corresponding symbols. (2.11)* • The student will write a fraction for a given part of an object. (3.08) • The student will read and write decimals expressed as tenths. (4.11) • The student will add with decimals expressed as tenths. (4.12) • The student will subtract with decimals expressed as tenths. (4.13) • The student will add with fractions having like denominators. (4.14) • The student will subtract with fractions having like denominators. (4.15)	• Students will use manipulatives to describe the relationship between fractions and whole numbers. (2.8) • Students will explore fractions in real world situations. (2.9) • Students will explore fractions in real world situations such as measurement. (3.06) • Students will write fractions for pictures. (3.07) • Using manipulatives, students will explain the role of a given fraction's numerator and denominator. (3.08) • Students will explore fractions in real world situations. (4.03) • Students will write fractions for pictures. (4.04) • Using manipulatives, students will explain the role of a given fraction's numerator and denominator. (4.05)	• The students will identify parts that represent one-half, one-third, and one-fourth. (2.33) • The students will write the symbols that correspond with halves, thirds, and fourths. (2.34) • The students will be able to draw equal parts and identify as fractions. (2.35) • The students will be able to demonstrate and write a fraction. (3.4) • The student will be able to read, write, add, and subtract decimals expressed as tenths and determine the value of a collection of money with a total value of less than $10.00. (4.7) • The student will be able to add and subtract fractions having like denominators. (4.8)	• The student will expand his/her knowledge of number concepts. (2.1)* • The student will expand his/her knowledge of number concepts. (3.1)* • The student will expand the concept of place value to include decimal and fractional parts. (4.2)*
Patterns and Relationships	• The student will count by 2's and 5's from 0 to 100. (2.02)* • The student will complete a sequence of ten or fewer consecutive whole numbers between 0 and 99. (2.04)* • The student, given an ordered set of objects, will identify the positions sixth through tenth. (2.06) • The student will determine the next sequence of terms, symbols, or objects in a given pattern. (2.21) • The student will complete a sequence of ten or fewer consecutive whole numbers between 0 and 500. (3.03)* • The student, given appropriate data, will construct a simple bar or picture graph. (4.21)	• Students will count by 2's (evens and odds), 5's, and 3's. (2.6) • Students will use calculator to investigate number patterns. (2.10) • Students will count by 4's, 6's, 7's, 8's, and 9's. (3.04) • Student will use a calculator to investigate number patterns. (3.09) • Students will explore patterns in the multiplication facts. (3.22) • Students will use a calculator to investigate number patterns. (4.06) • Students will explore patterns in multiplication facts. (4.14)	• The student will be able to read, write, and complete a sequence of numbers from 0-99. (2.1) • The students will identify ordinal numbers from 1-20. (2.2) • The students will determine the next sequence in a given pattern (objects, symbols, shapes, numbers). (2.6) • The student will be able to identify the place value for a 4-digit number and compare and sequence the numbers. (3.1) • The student will be able to construct a simple bar graph when given appropriate data. (4.13)	• The student will expand his/her knowledge of number concepts. (2.1)* • The student will expand his/her knowledge of number concepts. (3.1)* • The student will collect, interpret, and construct a representation of statistical data. (4.7)*

*** Included under more than one category!**

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BLUE RIDGE ASSESSMENT PROJECT

National Council for the Social Studies Standards (NCSS)	***Virginia SOL'S - Harrisonburg*****	***Rockingham***	***Albemarle***	***Orange***
Theme	Neighborhood and Community Our Community and Other Communities Virginia Studies	Neighborhood and Community Our Community and Other Communities Virginia Studies	Families, Communities, and Lifestyles Our Community - Past and Present Our State - Past and Present The 50 States	
Notes	Harrisonburg curriculum list teaching strategies, resources, assessments, and integrated activities for each SOL.	Based on Iowa Test of Basic Skills; also included knowledge and skill objectives, SOL's, and suggested activities. ITBS 4th grade goals are used in both 3rd and 4th, but separate curriculum development for Virginia Studies.	Included "concept strands" for K-5, 6-8, and 9-12.	Included domain, core knowledge, critical skills, suggested opportunities for application and appreciations. Higher order thinking built into curriculum.
Culture	• Students will compare $ from different parts of the world. • Students will identify Indian tribes and compare and contrast their early communities. • Students will compare customs and habits of different ethnic groups both nationally and internationally (3.10) • Students will identify and locate the various cultural groups that contributed to Virginia's heritage. (4.8)* • Students will compare and contrast regional customs and lifestyles in early Virginia. (4.9)* • Students will describe the culture of Native Americans and their contributions to European settlers. (4.11)*	• Students will identify the way in which holidays are celebrated. • Students will recognize a child care custom that cultures share. • Students will identify cooperative behavior within a community. • Students will recognize what cultures have in common. • Students will recognize an anthropological term or concept. • Students will recognize cultural diversity. • Students will recognize a sociological term or concept. • Students will discriminate between urban and rural characteristics. • Students will define concept of culture. • Students will gain insight into the life and culture of Native Americans at the time of European exploration and settlement. • Students will recognize cultural and educational development in Virginia from 1800-1850.	• Students will examine the traditions and lifestyles of diverse cultures. • Students will be introduced to Native Americans of Albemarle County (Eastern Woodland Indian).* • Students will investigate Colonial/Revolutionary lifestyles - via Monticello.* • Students will learn about self-sufficient plantations.* • Students will become familiar with Thomas Jefferson (science, politics, and humanities).* • Students will examine the way of life of the different inhabitants of Albemarle in the past through an exploration of historical eras.* • Students will explore and describe commonalities and differences in the ways communities address similar human needs and concerns (focus: Japan).	• Students will learn about the customs and traditions of local citizens within various ethnic backgrounds. • Students will learn about various ethnic and cultural groups that settled Virginia. • Students will learn about the culture of Woodland Indians.

*** Included under more than one category!**

****Harrisonburg has a Social Studies curriculum guide based largely on the SOL'S with several local objectives. Fluvanna and Greene Counties use VA SOL'S as their curriculum guide for Social Studies.**

BLUE RIDGE ASSESSMENT PROJECT

NCSS	***Virginia SOL'S - Harrisonburg****	***Rockingham***	***Albemarle***	***Orange***
Time, Continuity and Change	• Students will recognize various economic systems used by colonists and Indians - i.e. barter system.* • Students will identify reasons why the Virginia colony was settled and give reasons for its hardships and successes. (4.5) • Students will describe how selected individuals made outstanding contributions to Virginia's history. (4.10) • Students will describe the process by which a government was established in 17th century Virginia. (4.12) • Students will research and use the events that led Virginia to participate in the Revolution, identify Revolutionary leaders who were Virginians, and identify ideals expressed by these persons through the Virginia Declaration of Rights and the Virginia Statue of Religious Freedom. (4.13) • Students will identify the major events in Virginia history from 1607-1850 in chronological order. (4.14)	• Students will select an aspect of American lifestyle which has changed with history. • Students will recognize a historical role of Native Americans. • Students will recognize the historical background of religious freedom in the United States. • Students will identify a social problem caused by American western settlement. • Students will identify a goal of early explorers. • Students will describe the westward expansion's effect on the economy of Virginia. • Students will describe the technology, people, and changes that contributed to Virginia's industrial and economical growth from 1800-1850. • Students will learn about the exploration and settlement of Virginia. • Students will learn about the hardships and struggles of Jamestown. • Students will make and use a time line. • Students will learn about growth and expansion of the Virginia colony and how life changed due to it. • Students will examine events, territorial disputes, and resolutions during 1750-1765. • Students will identify Virginia Revolutionary patriots. • Students will describe Virginia's role in the Revolutionary War. • Students will explain the importance of the Lewis and Clark expedition. • Students will identify characteristics of the first four Virginia presidents (1789-1831).	• Students will explain the meaning and historical background of certain patriotic symbols. • Students will be introduced to Native Americans of Albemarle County (Eastern Woodland Indian).* • Students will investigate Colonial/Revolutionary lifestyles - via Monticello.* • Students will learn about self-sufficient plantations.* • Students will become familiar with Thomas Jefferson (science, politics, and humanities).* • Students will examine the way of life of the different inhabitants of Albemarle in the past through an exploration of historical eras.* • Students will relate the story of the early history of Virginia and will appreciate the unique role of Virginia in the establishment of a new country.	• Students will recognize great heros: George Washington, Abraham Lincoln, Martin Luther King, Jr. • Students will learn the history of Orange County. • Students will learn about the House of Burgesses. • Students will learn about the structure of early state government. • Students will learn about people who helped establish Virginia government. • Students will learn about Virginia's role in the emerging nation. • Students will learn about the Jamestown settlement. • Students will learn about Williamsburg as the center of Colonial government and culture. • Students will learn about the expansion of the Virginia frontier. • Students will learn about the American Revolution.

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BLUE RIDGE ASSESSMENT PROJECT

NCSS	*Virginia SOL'S - Harrisonburg***	*Rockingham*	*Albemarle*	*Orange*
People, Places, and Environment	• Students will recite or write the names associated with individual place location. (2.3) • Students will explain landmarks and other historical/geographical features. (2.4) • Students will use and draw simple maps. (2.6) • Students will locate the United States and Virginia on a map. (2.12) • Students will identify local, state, and national symbols. (2.13) • Students will gather and interpret information from simple graphics. (2.14) • Students will identify environmental features in the local community. (3.5) • Students will draw a simple map of the neighborhood and community with legend and directional symbol. (3.6) • Students will compare and contrast surrounding communities. (3.7) • Students will recognize change in the environment and describe ways people adapt to change. (3.8) • Students will recognize the shape of the United States and Virginia, and that most other states have distinctive shapes. (3.11) • Students will recognize and define global features. (3.12) • Students will use the calendar to identify the months in the year and seasonal celebrations. (3.13) • Students will interpret and make simple charts, graphs, and scales. (3.14) • Students will make and interpret simple maps and demonstrate proficiency in using a globe. (4.1)	• Students will recognize the relationship between geography and food production. • Students will discriminate among different types of agricultural work. • Students will recognize proper land use. • Students will identify sequence in agricultural work. • Students will demonstrate the ability to interpret maps. • Students will recognize a geographic term or concept. • Students will recognize a method of measuring time and temperature. • Students will identify a land form. • Students will identify geographic characteristics of regions. • Students will chose a reason for conservation. • Students will recognize the relationship between climate and housing. • Students will identify a similarity that people within a culture share. • Students will identify a duty of an ecologist. • Students will identify an action that will affect the environment. • Students will recognize and use basic map and globe skills. • Students will demonstrate proficiency in map skills of Virginia. • Students will be familiar with directional symbols and map legends. • Students will identify state symbols and explain their meaning.	• Students will appreciate the diversity of our world in terms of geography and ecosystems, landforms, climate, animal life, language, clothing, customs, games, beliefs, literature, aesthetic products, and transportation. • Students will understand and appreciate the history, geography, resources, and industry of Albemarle County. • Students will expand their geographic literacy and will demonstrate proficiency with globes and maps related to Virginia, the United States, and North America. • Students will explore the geography and natural resources of Virginia and will explain the development of Virginia in terms of its geography and natural resources.	• Students will read simple maps and globes. • Students will identify the relationship of Virginia, United States, North America, and continents on maps and globes. • Students will identify North, South, East, and West. • Students will identify map symbols and map legends. • Students will identify Orange County's physical map features. • Students will learn how to use a county map. • Students will learn to use map keys and legends. • Students will use intermediate directions (NE, NW, SE, SW). • Students will use charts, graphs, and maps. • Students will identify three geographical regions of Virginia. • Students will identify main geographical features of Virginia. • Students will identify states that border Virginia.

• Included under more than one category!

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BLUE RIDGE ASSESSMENT PROJECT

NCSS	***Virginia SOL'S - Harrisonburg*****	***Rockingham***	***Albemarle***	***Orange***
	• Students will locate and identify land and water features on maps and globes. (4.2) • Students will identify and locate Virginia, its bordering states, and its major land and water features on a United States map. (4.3) • Students will identify state symbols and their meanings. (4.4)			
Individual Development and Identity	• Students will make class rules. (2.1) • Students will tell how and why rules protect rights and property. (2.2) • Students will examine likenesses and differences in communities. (2.5) • Students will identify different ways people communicate. (2.9) • Students will use the media to gather information about current events. (2.11) • Students will demonstrate courtesy in social interactions. (3.1) • Students will listen, observe, and follow instructions. (3.2)	• Students will identify an example good manners.	• Students will gain experiences in social interactions in learning to become good citizens.*	• Students will express and support an opinion. • Students will compare and contrast. • Students will read and research. • Students will gather information from local sources.
Individuals, Groups, and Institutions	• Students will recognize interdependence of people and groups. (3.9)	• Students will recognize a worker in the field of communications. • Students will select an example of a federal or city service. • Students will realize reason for rules. • Students will identify the concept of freedom of speech. • Students will recognize the purpose of taxation. • Students will identify political cooperation. • Students will select the purpose of a governmental branch. • Students will recognize the branches of government. • Students will recognize the powers of the federal government.	• Students will identify and describe ways that communities influence daily life. • Students will examine problems and issues which face Virginia today.	• Students will recognize the differences in communities and neighborhoods. • Students will identify the relationship of the individual and family in the community. • Students will understand the structure of county government. • Students will learn ways citizens can impact their county government. • Students will have an understanding of local taxes. • Students will understand how they are represented in the state.* • Students will identify current controversial issues that affect our state.*

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BLUE RIDGE ASSESSMENT PROJECT

NCSS	***Virginia SOL'S - Harrisonburg*****	***Rockingham***	***Albemarle***	***Orange***
		• Students will identify the reason for public education. • Students will recognize the role of the family.		
Power, Authority and Governance	• Students will actively participate in the decision-making processes by identifying problems and suggesting possible solutions. (3.3)	• Students will identify the role of a group leader. • Students will identify the choices in a decision-making process.		• Students will learn how to participate in making rules. • Students will learn the need for rules to protect rights and property in a communities and neighborhoods.
Production, Distribution, and Consumption	• Students will describe how people are dependent on each other for goods and services. (2.7) • Students will identify natural resources of their community and state their importance. (2.8) • Students will identify different means of transportation. (2.10) • Students will recognize various economic systems used by colonists and Indians - i.e. barter system.* • Students will identify and locate Virginia's natural resources, major crops, products, and industries and determine their role in the agricultural and industrial growth of the state. (4.6) • Students will identify the imports and exports of early Virginia that were important to the growth of the state. (4.7)	• Students will recognize a producer of goods. • Students will select an example of a city service. • Students will distinguish between paid and volunteer occupations. • Students will select an appropriate form of payment. • Students will distinguish among needs, goods, and services. • Students will identify a community health worker. • Students will recognize an economic term or concept • Students will recognize the relationship between geography and land use. • Students will recognize the relationship between resources and production. • Students will select a natural resource used by early American settlers. • Students will identify a universal agricultural concern. • Students will define and use basic economic terminology. • Students will describe how both urban and rural areas contribute to Virginia's economic growth.		• Students will recognize the goods and services in communities and neighborhoods. • Students will recognize Virginia's "cash crop" and natural resources.

*** Included under more than one category!**

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BLUE RIDGE ASSESSMENT PROJECT

NCSS	***Virginia SOL'S - Harrisonburg*****	***Rockingham***	***Albemarle***	***Orange***
Science, Technology, and Society	• Students will use resource materials to compile information for reports. (3.15)	• Students will identify a reason for the establishment of international trade. • Students will recognize the prerequisites of starting a business. • Students will recognize an effect of technology. • Students will select the requirements necessary for a transportation system. • Students will use resource material and library references.	• Students will identify transportation that is important to communities everywhere. • Students will identify technology that is important to communities everywhere. • Students will identify the communication and basic needs that are important to communities everywhere.	
Global Connections/ Interdependence				• Students will recognize world issues that affect Orange County
Civic Ideals and Practices	• Students will understand the meaning and significance of the Pledge of Allegiance and other patriotic symbols. (3.4)	• Students will learn about the establishment of Virginia government. • Students will identify and understand the laws imposed by British government - stressing the importance of taxation. • Students will recognize basic American freedoms guaranteed in the Bill of Rights.	• Students will continue to develop good citizen behaviors. • Students will gain experiences in social interactions in learning to become good citizens.*	• Students will understand how they are represented in the state.* • Students will identify current controversial issues that affect our state.*

*** Included under more than one category!**

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BLUE RIDGE ASSESSMENT PROJECT

Health/Science Areas of Study	***Virginia Standards of Learning (SOL'S)***	***Harrisonburg***	***Rockingham***	***Albemarle***	***Orange***
As identifying, categorizing, and/or sequencing basic elements and components of subject matter.	• The student will define drugs as substances that affect the mind and/or body functions. (H2.1) • The student will identify and demonstrate refusal skills. (H2.2) • The student will identify and practice good health habits. (H2.3) • The student will know that keeping the home, school, & community clean helps prevent disease. (H2.4) • The student will classify substances as solids, liquids, or gases. (S2.7) • The student will demonstrate an awareness of feelings in self and others. (H2.8) • The student will recognize stressful situations and choose healthy outlets to deal with stress. (H2.9) • The student will identify the food groups and a variety of foods from each group and plan a well-balanced meal. (H2.10) • The student will know that green plants produce and store food. (S2.12) • The student will know that there are different kinds of pollutants in the environment and will suggest possible methods for reducing them in the community. (S2.13) • The student will explain environmental factors that affect health. (H2.13)	• Students will identify and demonstrate good personal health habits. (H2.5) • Students will demonstrate that keeping home, school, and community clean helps prevent disease. (H2.6) • Students will recognize stressful situations and choose healthy outlets to deal with stress. (H2.7) • Students will identify the food groups and accordingly select nutritious foods that promote healthy bodies and teeth. (H2.8) • Students will identify different kinds of pollutants in the environment and will suggest possible methods for reducing them in the community. (H2.9) • Students will be able to name growth patterns that affect body size, appearance and self-concept. (H3.1) • Students will recognize the components and functions of major body systems: skeletal, muscular, circulatory, digestive (teeth), urinary, respiratory, and nervous. (H3.2) • Students will list and demonstrate rules and precautions for personal safety at home, school, and in our community. (H3.4) • Students will recognize and demonstrate the properties of matter. (S3.5)	• The student will define drugs as substances that affect the mind and/or body functions. (H2.1) • The student will identify the food groups, a variety of foods from each, and plan a well-balanced meal. (H2.14) • The student will identify procedures to follow in case of an accident or sudden illness. (H2.20) • The student will identify common legal drugs and their harmful effects. (H3.2) • The student will identify sources of air pollution and its effect on health. (H3.4) • The student will identify sources of water and land pollution and their effect on health. (H3.5) • The student will identify sources of noise pollution & its effect on health. (H3.6) • The student will identify ways to prevent the spread of disease. (H3.8) • The student will identify foods that affect growth and development. (H3.18) • The student will know rules and precautions for leisure activities. (H3.25) • The student will know rules and precautions of water safety. (H3.26) • The student will identify dangers in the immediate environment. (H3.27)	• Describe characteristics of solids, liquids, and gases. • Classify matter as solid, liquid, or gas. • Verify that air has weight, takes up space, and exerts pressure. • Describe the hydrologic cycle. • Classify animals as vertebrate or invertebrate. • Differentiate the characteristics of the five classes of vertebrates. • Classify vertebrates to class. • Describe properties of mixtures and solutions. • Find examples of simple machines in common objects and explain how they make work easier. • Describe characteristics that define particular biomes. • Explain the function of plant structures involved in reproduction. • Describe ways in which populations of plants and animals in a community interact with one another and with their environment. • Describe minerals by their physical properties. • Describe sun, moon, planets, and other objects in the sky using size, shape, color, brightness and movement. • Describe differences and similarities of offspring of the same parents (plant or animal).	• The student will classify substances as solids, liquids, or gases and describe simple changes from one state to another. (2.9) • The student will describe and demonstrate some general characteristics of static electricity. (2.12) • The student will know that plants produce food for themselves and other living organisms. (2.14) • The student will place natural events in order and use the sequence to tell what comes next. (3.5) • The student will identify the types of simple machines and demonstrate the use of each. (3.7) • The student will identify the major components of soil and describe the importance of soil to life on earth, including ways man has used and misused it. (3.8) • The student will draw or label the basic stages of the water cycle. (3.9) • The student will identify some characteristics of major groups of plants and animals and will recognize that members of the same species are alike in major ways but vary enough to be individuals. (3.11)

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BLUE RIDGE ASSESSMENT PROJECT

Health/Science	***Virginia SOL'S***	***Harrisonburg***	***Rockingham***	***Albemarle***	***Orange***
	• The student will describe responsible procedures for personal safety when unsupervised. (H2.19) • The student will identify common legal drugs and their harmful effects. (H3.2) • The student will observe and classify objects into the sets and subsets of similar characteristics. (S3.2) • The student will identify sources of air pollution and its effect on health. (H3.4) • The student will identify sources of water and land pollution and their effect on health. (H3.5) • The student will identify sources of noise pollution and its effect on health. (H3.6) • The student will describe a given object's position and motion in relation to self. (S3.6) • The student will place natural events in order and use the sequence to tell what comes next. (S3.7) • The student will identify ways to prevent the spread of disease. (H3.8) • The student will describe some forms of energy and tell some ways energy is produced. (S3.8) • The student will identify the types of simple machines and demonstrate the use of each. (S3.9) • The student will describe the sun and demonstrate that it provides heat and light which are necessary for life on earth. (S3.11)	• Students will describe the contributions of the sun and moon to life in our community regarding heat, light, shadow, and motion. (S3.6) • Students will identify the types of machines and their sources of energy. (S3.7) • Students will classify plants and animals by similar characteristics. (S3.8) • Students will classify habitats. (S3.9) • Students will identify and practice rules of conservation in order to protect the earth's resources. (S3.11). • Students will be able to describe the basic components of the solar system and some of the benefits of its exploration. (S4.3) • Students will be able to demonstrate an understanding of the way in which each of the three classes of rocks (igneous, sedimentary, metamorphic) is formed. (S4.4) • Students will identify, describe, and use electrical conductors, insulators, simple circuits, dry cells (energy sources), bulbs (energy receivers), and magnets. (S4.5) • Students will be able to identify basic flower parts, their functions, edible plants, and plant parts. (S4.11)	• The student will have knowledge of skills and attitudes useful for coping with being home alone. (H3.30) • Know the basic life stages of living things. (II.A.1) • Know that green plants produce and store food. (II.A.2) • Identify plants particular to their environment. (II.A.3) • Know the basic life stages of animals. (II.B.1) • Identify animals particular to their environment. (II.B.2) • Identify insects particular to their environment. (II.B.4) • Describe helpful and harmful aspects of insects and their lives. (II.B.5) • Identify natural and artificial sources of light. (III.A.2) • Describe and demonstrate some general characteristics of static electricity. (III.C) • Identify and describe sources of heat. (III.D.3) • Identify and describe different kinds of motion. (III.E.1) • Identify the speed of objects as fast or slow. (III.E.2) • Classify substances as solids, liquids, or gases. (III.F) • Name the four seasons. (IV.A.1) • Identify the weather characteristics of the four seasons. (IV.A.2) • Identify the major land formations of the native neighborhood. (IV.B.1) • Identify rocks and minerals particular to the neighborhood. (IV.B.3)		• The student will know that different populations of plants and animals are found in different environments and that they may become endangered or extinct. (3.13) • The student will describe the basic components of the solar system. (4.4) • The student will describe electrical sources and uses. (4.6) • The student will name the basic cloud formations and will record daily weather conditions using basic instruments of weather prediction used by meteorologists. (4.7) • The student will know the basic parts of plants and their functions. Study should include functions of roots, stems, leaves, and flowers and seeds with emphasis on photosynthesis and reproduction. (4.10)

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BLUE RIDGE ASSESSMENT PROJECT

Health/Science	***Virginia SOL'S***	***Harrisonburg***	***Rockingham***	***Albemarle***	***Orange***
	• The student will identify the major components of soil and describe importance of soil to life on earth. (S3.12) • The student will describe the type of behavior that leads to making, keeping, and losing friends. (H3.12) • The student will identify foods that are needed for energy and growth. (H3.13) • The student will observe and describe how animals behave in different ways to meet life needs. (S3.14) • The student will identify some characteristics of major groups of plants and animals. (S3.15) • The student will recognize individual growth patterns. (H3.15) • The student will know that different populations of plants and animals are found in different environments. (S3.18) • The student will identify dangers in the immediate environment. (H3.20) • The student will give reasons for the use of legal and illegal drugs. (H4.1) • The student will differentiate between positive and negative peer pressure and will demonstrate refusal skills. (H4.3) • The student will define the term "communicable disease" (infectious disease) and identify ways diseases are transmitted. (H4.5) • The student will identify the body's defenses against communicable (infectious) diseases. (H4.6)	• Students will be able to define the term "communicable disease" and identify ways in which diseases are transmitted and prevented. (H4.14) • Students will be able to recognize the differences between scientific facts and misconceptions as they relate to disease. (H4.15)	• Identify the sun, moon, and earth and their relationship to the other planets. (IV.C.1) • Observe and classify objects into sets and subsets of similar characteristics. (I.A.1) • Place natural events in order and use the sequence to tell what comes next. (I.A.5) • Identify some characteristics of major plant groups. (II.A.1) • Know that different populations of plant are found in different environments. (II.A.4) • Identify some characteristics of major animal groups. (II.B.2) • Know that different populations of animals are found in different environments. (II.B.5) • Describe and demonstrate some general characteristics of current electricity. (III.A) • Identify the types of simple machines and demonstrate the use of each. ((III.B) • Describe some forms of energy and tell some ways energy is produced. (III.D) • Describe a given object's position and motion in relation to self. (III.E) • Describe the sun and demonstrate that it provides heat and light necessary for life on earth. (IV.A.1) • Observe and investigate some general characteristics of stars. (IV.A.2) • Identify the major components of soil and describe the importance of soil to life on earth. (IV.B.1)		

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BLUE RIDGE ASSESSMENT PROJECT

Health/Science	***Virginia SOL'S***	***Harrisonburg***	***Rockingham***	***Albemarle***	***Orange***
	• The student will identify certain diseases that may be prevented. (H4.7) • The student will identify, describe, and use electrical conductors, insulators, simple circuits, dry cells (energy sources), and bulbs (energy receivers). (S4.7) • The student will recognize the difference between scientific facts and misconceptions as they relate to disease. (H4.8) • The student will list behaviors that contribute to positive mental growth and development. (H4.9) • The student will describe the basic components of the solar system as well as major theories that have been proposed throughout history. (S4.10) • The student will know the basic parts of plants and their function. (S4.13) • The student will recognize the positive and negative influences of peer groups. (H4.13) • The student will understand the differences between renewable and non-renewable natural resources and will describe ways in which people sometimes misuse and waste the earth's resources. (S4.15) • The student will know that plants and animals produce offspring that are alike in major ways but vary to be individuals. (S4.16)		• Know that water can exist as a liquid, solid, or gas. (IV.C.1) • Draw or label the basic stages of the water cycle. (IV.C.2) • Know the basic parts of plants and their function. (II.A.1) • Know that plants and animals produce offspring that are alike in major ways but vary enough to be individuals. (II.B.1) • Identify and describe stages in the life cycle of an insect. (II.B.2) • Identify behaviors which define an insect as social. (II.B.3) • Will infer that solids, liquids, and gases are made up of tiny bits of matter called molecules and atoms. (III.A.2) • Identify, describe, and use electrical conductors, insulators, simple circuits, dry cells (energy sources), and bulbs (energy receivers). (III.B.1) • Identify the basic parts of an electric motor. (II.B.2) • Describe the basic components of the solar system as well as major theories that have been proposed throughout history. (IV.A.1) • Describe earth's atmosphere and explain why it is necessary for life. (IV.B.1) • Identify various types of weather phenomena. (IV.B.4)		

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Health/Science	***Virginia SOL'S***	***Harrisonburg***	***Rockingham***	***Albemarle***	***Orange***
	• The student will infer that solids, liquids, and gases are made up of tiny bits of matter called molecules and atoms. (S4.17) • The student will identify the different parts of a cell and distinguish among different kinds of cells in the body. (H4.18) • The student will explain the structure of the circulatory, respiratory, digestive, and nervous systems. (H4.19)				
As understanding patterns and relationships.	• The student will observe and describe changes that take place over time in both living and non-living things. (S2.2) • The student will identify and demonstrate refusal skills. (H2.2) • The student will identify and practice good personal health habits. (H2.3) • The student will recognize the importance of the roles of family members. (H2.7) • The student will observe and describe simple changes in matter from one state to another. (S2.8) • The student will describe the effect of seasonal changes on himself or herself and on his/her environment. (S2.9) • The student will know the basic life changes of living things. (S2.10) • The student will observe and discuss ways that eating affects activity and growth. (H2.11) • The student will explain environmental factors that affect health. (H2.13)	• The student will demonstrate that keeping home, school, and community clean helps prevent disease. (H2.6) • The student will recognize the components and functions of major body systems: skeletal, muscular, circulatory, digestive (teeth), urinary, respiratory, and nervous. (H3.2) • The student will identify good nutritional practices to promote proper growth and disease prevention. (H3.3) • The student will recognize and demonstrate the properties of matter. (S3.5) • The student will describe the sun and moons' contribution to life in our community regarding heat, light, shadow, and motion. (S3.6) • The student will identify the types of simple machines and their sources of energy. (S3.7) • The student will recognize causes and effects of water, weather, extinction, and pollution on the earth's surface. (S3.10)	• The student will know that keeping the home, school, and community clean helps prevent disease. (H2.4) • The student will realize that physical affection can be an expression of friendship, of celebration, or of a loving family. (H2.6) • The student will learn to identify TV advertising that appeals to our emotions rather than to our reasoning skills to make us want products. (H2.7) • The student will recognize the importance of the roles of family members. (H2.10) • The student will recognize stressful situations and choose healthy outlets to deal with stress. (H2.12) • The student will become aware of the changes occurring in the family life that affect daily living and produce strong feelings. (H2.13) • The student will observe and discuss ways that eating affects activity and growth. (H2.15)	• Compare and contrast the methods by which plants and animals perform life processes. • Explain similarities and differences between living things in various habitats. • Describe changes in matter from one state to another. • Predict whether light can travel through a variety of materials (solid, liquid, and gas). • Predict differences in sounds that travel through a variety of materials (solids, liquid, and gas). • Describe the hydrologic cycle. • Relate wind movement to land forms and air temperature. • Construct examples of both aquatic and terrestrial food chains and illustrate the relationships of the organisms within them. • Explain similarities and differences in behavior of animals in different habitats.	• The student will observe and describe changes that take place over a period of time in both living and non-living things. (2.5) • The student will classify substances as solids, liquids, gases and describe simple changes from one state to another. (2.9) • The student will describe the effect of seasonal changes on him/herself and the environment. (2.10) • The student will observe and describe basic life stages of various things and demonstrate proper care and handling of them. (2.13) • The student will describe a given object's position and its direction of motion in relation to self. (3.4) • The student will place natural events in order and use the sequence to tell what comes next. (3.5) • The student will know that energy is needed to make things move and describe the uses of some common sources of energy. (3.6)

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BLUE RIDGE ASSESSMENT PROJECT

Health/Science	***Virginia SOL'S***	***Harrisonburg***	***Rockingham***	***Albemarle***	***Orange***
	• The student will recognize how drugs affect health. (H3.1) • The student will identify common legal drugs and their harmful effects. (H3.2) • The student will identify sources of air pollution and its effect on health. (H3.4) • The student will identify sources of water and land pollution and their effects on health. (H3.5) • The student will infer the possible cause and effect of an event. (S3.5) • The student will identify sources of noise pollution & its effect on health. (H3.6) • The student will understand various ways of contracting communicable (infectious) diseases. (H3.7) • The student will describe some forms of energy and tell some ways energy is produced. (S3.8) • The student will recognize that family members are interdependent. (H3.9) • The student will understand that white light is a combination of many colors. (S3.10) • The student will describe the sun and demonstrate that it provides heat and light which are necessary for life on earth. (S3.11) • The student will recognize the importance of acquiring hobbies and using leisure time appropriately. (H3.11) • The student will identify the major components of soil & describe the importance of soil to life on earth. (S3.12)	• The student will be able to describe the basic components of the solar system and some of the benefits of its exploration. (S4.3) • The student will be able to demonstrate an understanding of the way in which each of the three classes of rocks (igneous, sedimentary, metamorphic) is formed. (S4.4) • The student will be able to evaluate a personal diet in relationship to a balanced diet and explain the effects of between meal eating. (H4.8) • The student will be able to demonstrate understanding of how body energy is related to eating. (H4.9) • The student will be able to identify and describe the function of the six major classes of nutrients and fiber and describe the function and hazards of food additives and preservatives. (H4.10) • The student will be able to identify basic flower parts, their functions, edible plants, and plant parts. (S4.11) • The student will be able to define the term "communicable disease" and identify ways in which diseases are transmitted and prevented. (H4.14)	• The student will explain environmental factors that affect health. (H2.17) • The student will become aware that babies grow inside the mother's body in a special place called the uterus. (H2.19) • The student will recognize that certain behaviors may signal danger. (H2.22) • The student will see how drugs affect health. (H3.1) • The student will identify common legal drugs and their harmful effects. (H3.2) • The student will identify sources of air pollution and its effect on health. (H3.4) • The student will identify sources of water and land pollution and their effects on health. (H3.5) • The student will identify sources of noise pollution and effects on health. (H3.6) • The student will understand various ways of contracting communicable (infectious) diseases. (H3.7) • The student will recognize that family members are interdependent. (H3.9) • The student will give examples of healthy coping strategies for dealing with feelings produced by changes in the family. (H3.12) • The student will describe the types of behavior that enable him or her to gain friends or lose friends. (H3.13) • The student will be conscious of how commercials use emotions to make us want products. (H3.14)	• Find examples of simple machines in common objects and explain how they make work easier. • Compare the reproductive process of various plants (flowering, cone-bearing, mosses, and ferns). • Describe ways in which populations of plants and animals in a community interact with one another and with their environment. • Relate temperature to the three states of matter. • Distinguish between physical and chemical changes. • Distinguish between rocks and minerals. • Describe how fossils provide evidence of earth's history and show how organisms and environments have changed over time.	• The student will identify the major components of soil and describe the importance of soil to life on earth, including ways man has used and misused it. (3.8) • The student will describe the relationship between the organisms in a simple food chain in both aquatic and terrestrial environments. (3.10) • The student will identify some characteristics of major groups of plants and animals and will recognize that members of the same species are alike in major ways but vary enough to be individuals. (3.11) • The student will describe electrical sources and uses. (4.6) • The student will describe the relationship between temperature and the three different states of matter. (4.8) • The student will describe ways in which the earth's surface is constantly changing and how these changes form the three classes of rocks. (4.9) • The student will know the basic parts of plants and their functions. Study should include functions of roots, stems, leaves, and flowers and seeds with emphasis on photosynthesis and reproduction. (4.10) • The student will describe ways populations of plants and animals in a community interact with one another & their environment. (4.11)

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Health/Science	*Virginia SOL'S*	*Harrisonburg*	*Rockingham*	*Albemarle*	*Orange*
	• The student will draw or label the basic stages of the water cycle. (S3.13) • The student will identify foods that are needed for energy and growth. (H3.13) • The student will describe how emotions and eating are interrelated. (H3.14) • The student will observe and describe how animals behave in different ways to meet life needs. (S3.14) • The student will recognize functions of certain systems of the human body. (H3.16) • The student will describe the relationship between two organisms in a simple food chain in both aquatic and terrestrial environments. (S3.16) • The student will know that species of plants and animals may become endangered or extinct. (S3.17) • The student will observe an object or event and make several inferences regarding the identity of the object or plausible reasons for the event. (S4.2) • The student will construct simple experiment in which only one variable is manipulated and all others are held constant. (S4.4) • The student will define the term "communicable disease" (infectious disease) and identify ways diseases are transmitted. (H4.5) • The student will describe the relationship between temperature and the three states of matter. (S4.8)		• The student will recognize that the use of violence on TV as the sole or primary means of solving problems is not acceptable and appropriate in healthy human relationships. (H3.15) • The student will recognize the importance of acquiring hobbies and using leisure time appropriately. (H3.17) • The student will describe how emotions and eating are interrelated. (H3.19) • The student will recognize individual growth patterns. (H3.20) • The student will recognize that all human beings grow and develop in a given sequence but that rates and patterns vary with individuals. (H3.21) • Observe and describe changes that take place over time in both living and non-living things. (I.A.1) • Observe and describe simple changes in matter from one state to another. (III.D.1) • Describe the effect of seasonal changes on himself and his environment. (IV.A.3) • Describe how native formations may have come into being. (IV.B.2) • Identify the sun, moon, and earth and their relationship to the other planets. (IV.C.1) • Observe and classify objects into sets and subsets of similar characteristics. (I.A.1) • Place natural events in order and use the sequence to tell what comes next. (I.A.5)		

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BLUE RIDGE ASSESSMENT PROJECT

Health/Science	*Virginia SOL'S*	*Harrisonburg*	*Rockingham*	*Albemarle*	*Orange*
	• The student will describe the basic components of the solar system as well as major theories that have been proposed throughout history. (S4.10) • The student will recognize that a balance of daily activities contribute to good mental health. (H4.10) • The student will know ways the extended family members contribute to the immediate family. (H4.12) • The student will describe ways in which the earth's surface is constantly changing. (S4.12) • The student will know the basic parts of the plants and their function. (S4.13) • The student will recognize the positive and negative influences of peer groups. (H4.13) • The student will describe ways in which populations of plants and animals in a community interact with one another and with their environment. (S4.14) • The student will understand the difference between renewable and non-renewable natural resources and will describe ways in which people sometimes misuse and waste the earth's resources. (S4.15) • The student will describe how eating between meals relates to having a healthy diet. (H4.16)		• Describe the relationship between the organisms in a simple food chain in both aquatic and terrestrial environments. (II.A.2) • Know that species of plants may become endangered or extinct. (II.A.3) • Describe the relationship between the organisms in a simple food chain in both aquatic and terrestrial environments. (II.B.3) • Know that species of animals may become endangered or extinct. (II.B.4) • Understand that white light is a combination of many colors. (III.C) • Describe a given object's position and motion in relation to self. (III.E) • Identify the major components of soil and describe the importance of soil to life on earth. (IV.B.1) • Describe mountains and valleys and be able to explain gradual changes that occur. (IV.B.2) • Trace historical changes in consumption and packaging in everyday life. (IV.D) • Observe an object or event and make several inferences regarding the identity of the object or plausible reasons for the event. (I.A.1) • Conduct simple experiments in which only one variable is manipulated and all others are held constant. (I.A.3) • Know the basic parts of plants and their function. (II.A.1)		

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Health/Science	*Virginia SOL'S*	*Harrisonburg*	*Rockingham*	*Albemarle*	*Orange*
			• Describe ways populations of plants and animals in a community interact with one another and with their environment. (II.A.2) • Know that plants and animals produce offspring that are alike in major ways but vary enough to be individuals. (II.B.1) • Describe the relationship between temperature & three states of matter. (III.A.1) • Identify the effects of the earth's rotation. (IV.A.2) • Describe the earth's atmosphere and explain why necessary for life. (IV.B.1) • Describe ways the earth's atmosphere is constantly changing. (IV.C.1) • Describe the conditions necessary for the formation of igneous, sedimentary, and metamorphic rocks. (IV.C.2) • Understand the differences between renewable and non-renewable natural resources and will describe ways in which people sometimes misuse and waste the earth's resources. (IV.D)		
As improving life coping and safety skills through explanation and/or demonstration. (ie. mental and physical health, social skills, safety)	• The student will share responsibilities and tasks and use materials in a safe manner. (S2.1) • The student will know that keeping the home, school, and community clean helps prevent disease. (H2.4) • The student will describe and practice attitudes and behaviors that make one a good family member, classmate, and friend. H2.5)	• The student will identify and respond to fire hazards in the environment. (H2.1) • The student will demonstrate pedestrian, traffic, and bicycle safety. (H2.2) • The student will identify procedures to follow in case of an accident or sudden illness. (H2.3) • The student will identify and demonstrate safe habits in the school environment. (H2.4)	• The student will identify and demonstrate refusal skills. (H2.2) • The student will identify and practice good personal skills. (H2.3) • The student will describe and practice attitudes and behaviors that make one a good family member, classmate, and friend. (H2.8) • The student will make decisions concerning daily activities. (H2.9)	• Students will identify common drugs and their effects on the body. • Students will demonstrate refusal skills to drugs: "just say no!" • Students will identify good personal health habits. • Students will identify practices that prevent disease. • Students will demonstrate cooperative behavior and communication skills.	• The student will demonstrate the proper methods of handling computer software. (2.1) • The student will demonstrate responsibility when working in cooperative groups. (2.3) • The student will use materials in a safe manner. (2.4)

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BLUE RIDGE ASSESSMENT PROJECT

Health/Science	***Virginia SOL'S***	***Harrisonburg***	***Rockingham***	***Albemarle***	***Orange***
	• The student will make decisions concerning daily activities. (H2.6) • The student will demonstrate an awareness of feelings in self and others. (H2.8) • The student will recognize stressful situations and choose healthy outlets to deal with stress.(H2.9) • The student will identify the food groups and a variety of foods from each group and plan a well-balanced meal. (H2.10) • The student will demonstrate proper care and handling of living organisms and show respect for life. (S2.11) • The student will select nutritious snacks that promote good health, especially dental health. (H2.12) • The student will know that there are different kinds of pollutants in the environment and will suggest possible methods for reducing them in his or her community. (S2.13) • The student will practice pedestrian, traffic, and bicycle safety. (H2.15) • The student will identify procedures to follow in case of an accident or sudden illness. (H2.16) • The student will practice safe habits in the school environment. (H2.17) • The student will recognize that certain behaviors may signal danger. (H2.18) • The student will know and practice fire drill procedures at home and school. (H2.21)	• The student will identify and demonstrate good personal health habits. (H2.5) • The student will demonstrate that keeping the home, school, and community clean helps prevent disease. (H2.6) • The student will recognize stressful situations and choose healthy outlets to deal with stress. (H2.7) • The student will identify the food groups and accordingly select nutritious foods that promote healthy bodies and teeth. (H2.8) • The student will identify different kinds of pollutants in the environment and will suggest possible methods for reducing them in the community. (H2.9) • The student will identify good nutritional practices to promote proper growth and disease prevention. (H3.3) • The student will list and demonstrate rules and precautions for personal safety at home, school, and in our community. (H3.4) • The student will identify and practice rules of conservation in order to protect the earth's resources. (H3.11) • The student will be able to describe and identify emergency and first aid procedures and basic safety rules. (H4.6) • The student will be able to describe skills and behaviors that are useful for coping with being home alone. (H4.7)	• The student will demonstrate an awareness of feelings in self and others. (H2.11) • The student will recognize stressful situations and choose healthy outlets to deal with stress. (H2.12) • The student will select nutritious snacks that promote good health, especially dental health. (H2.16) • The student will practice proper care of the sense organs. (H2.18) • The student will practice safe habits in the school environment. (H2.21) • The student will describe responsible procedures for personal safety when unsupervised. (H2.23) • The student will know and practice fire drill procedures at home and school. (H2.24) • The student will practice traffic and bicycle safety. (H2.25) • The student will advance in readiness to say "no" and to tell a trusted adult, such as a parent, teacher, minister, grandparent, guardian, guidance counselor, or doctor in private about inappropriate approaches from strangers, neighbors, family members, and others. (H2.26) • The student will know and practice strategies to "just say no" to drug use. (H3.3) • The student will demonstrate a sense of belonging in group work and play. (H3.10)	• Students will understand the family. • Students will identify the basic food groups and discuss good nutrition and its effects. • Students will be familiar with environmental factors that affect health. • Students will learn basic safety and first aid skills (traffic, fire, injury, general hazards). • Students will understand healthy uses of drugs. • Students will identify sources of pollution and the effects on personal health. • Students will develop interpersonal skills. • Students will understand how nutrition affects health. • Students will recognize basic functions of certain body systems. • Students will recognize symptoms that relate to specific illnesses. • Students will identify ways germs are transmitted. • Students will list behaviors/attitudes that contribute to positive mental health. • Students will recognize positive/negative influence of peer groups. • Students will recognize the influence of the media. • Students will evaluate their personal diets. • Students will identify different kinds of cells in the body and how they work. • Students will recognize dangers of firearms and other weapons.	• The student will observe and describe basic life stages of various things and demonstrate proper care and handling of them. (2.13) • The student will share responsibilities and tasks and use materials in a safe manner. (3.1) • The student will identify and select tasks and responsibilities and use materials in a safe manner.

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BLUE RIDGE ASSESSMENT PROJECT

Health/Science	***Virginia SOL'S***	***Harrisonburg***	***Rockingham***	***Albemarle***	***Orange***
	• The student will share tasks and responsibilities and use materials in a safe manner. (S3.1) • The student will recognize how drugs affect health. (H3.1) • The student will identify common legal drugs and their harmful effects. (H3.2) • The student will know and practice strategies to "just say no" to drug use. (H3.3) • The student will recognize various ways of contracting communicable (infectious) diseases. (H3.7) • The student will identify ways to prevent the spread of disease. (H3.8) • The student will demonstrate appropriate interpersonal problem solving skills. (H3.10) • The student will recognize the importance of acquiring hobbies and using leisure time appropriately. (H3.11) • The student will describe the types of behavior that lead to making, keeping, and losing friends. (H3.12) • The student will describe and demonstrate the correct procedure in reporting and responding to an emergency. (H3.17) • The student will know rules and precautions for leisure time activities. (H3.18) • The student will know rules and precautions of water safety. (H3.19) • The student will identify dangers in the immediate environment. (H3.20)	• The student will be able to evaluate a personal diet in relationship to a balanced diet and explain the effects of between meal eating. (H4.8) • The student will demonstrate knowledge of food safety practices. (H4.12) • The student will be able to recognize symptoms that may indicate illness, allergic reaction, or toxic reaction. (H4.13)	• The student will express what he or she likes about himself or herself to continue developing a positive self-image. (H3.11) • The student will give examples of healthy coping strategies to deal with the feelings produced by changes in the family. (H3.12) • The student will describe the types of behavior that enable him or her to gain or lose friends. (H3.13) • The student will demonstrate appropriate interpersonal problem solving skills. (H3.16) • The student will describe and demonstrate how to respond to good touches and how to handle inappropriate approaches from strangers, neighbors, relatives, and others. (H3.22) • The student will recognize that everyone has strengths and weaknesses and that all persons need to be accepted and appreciated as worthwhile. (H3.23) • The student will describe and demonstrate the correct procedure in reporting and responding to an emergency. (H3.24) • The student will explain traffic safety practices. (H3.28) • The student will practice pedestrian safety. (H3.29) • The student will learn ways to recognize potential dangers of familiar persons and/or strangers. (H3.31) • The student will practice home safety rules. (H3.32)		

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BLUE RIDGE ASSESSMENT PROJECT

Health/Science	***Virginia SOL'S***	***Harrisonburg***	***Rockingham***	***Albemarle***	***Orange***
	• The student will explain traffic safety practices. (H3.21) • The student will practice pedestrian safety. (H3.22) • The student will have knowledge of skills and attitudes that are useful for coping with being home alone. (H3.23) • The student will learn ways to recognize and respond to potential dangers of familiar persons and/or strangers. (H3.24) • The student will identify and select tasks and responsibilities and use materials in a safe manner. (S4.1) • The student will recognize the dangers of using alcohol, tobacco, and other drugs. (H4.2) • The student will differentiate between positive and negative peer pressure and will demonstrate refusal skills. (H4.3) • The student will recognize symptoms that may indicate an allergic or toxic reaction or other serious illness. (H4.4) • The student will identify the body's defenses against communicable (infectious) diseases. (H4.6) • The student will recognize that a balance of daily activities contributes to good mental health. (H4.10) • The student will demonstrate socially acceptable habits and mentally healthy attitudes toward success and disappointments. (H4.11)		• Share responsibilities and tasks. (I.B.1) • Use materials in a safe manner. (I.B.2) • Demonstrate proper care and handling of animals to show respect for their lives. (II.B.3) • Use materials in a safe manner. (I.B.1) • Share tasks and responsibilities. (I.B.2) • Use materials in a safe manner. (I.B.1) • Identify and select tasks and responsibilities. (I.B.2) • Identify methods of sterilization in relationship to science and medicine. (I.B.3)		

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Health/Science	*Virginia SOL'S*	*Harrisonburg*	*Rockingham*	*Albemarle*	*Orange*
	• The student will recognize the positive and negative influences of peer groups. (H4.13) • The student will recognize the positive and negative influences of the media on one's personal health choices. (H4.14) • The student will describe how eating between meals relates to having a healthy diet. (H4.16) • The student will demonstrate knowledge of food safety practices. (H4.17) • The student will identify and explain first aid procedures for emergencies. (H4.21) • The student will describe safety rules for bicycling, motorbiking, hiking, and camping. (H4.22) • The student will describe skills and behaviors that are useful for coping with being home alone. (H4.23)				
As appreciating and understanding the nature of discovery (impacts on society, recognition of ongoing processes, and properly examining validity of new discoveries).	• The student will identify the body's defenses against communicable (infectious) diseases. (H4.6) • The student will recognize the difference between scientific facts and misconceptions as they relate to disease. (H4.8) • The student will describe the basic components of the solar system as well as major theories that have been proposed throughout history. (S4.10)	• The student will be able to describe the basic components of the solar system and some of the benefits of its exploration. (S4.3) • The student will be able to identify and describe the function of the six major classes of nutrients and fiber and describe the function and hazards of food additives and preservatives. (H4.10) • The student will be able to recognize the difference between scientific facts and misconceptions as they relate to disease. (H4.15)	• Know there are different kinds of pollutants in the environment and will suggest possible methods for reducing them in the community. (IV.D) • Know that species of plants may become endangered or extinct. (II.A.3) • Know that species of animals may become endangered or extinct. (II.B.4) • Describe the basic components of the solar system as well as major theories that have been proposed throughout history. (IV.A.1)		• The student will describe possible methods for reducing different kinds of pollutants in the local and global environment. (2.2) • The student will know that different populations of plants and animals are found in different environments and that they may become endangered of extinct. (3.13) • The student will describe events in and benefits of space study. (4.5)

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BLUE RIDGE ASSESSMENT PROJECT

Health/Science	***Virginia SOL'S***	***Harrisonburg***	***Rockingham***	***Albemarle***	***Orange***
	• The student will describe some major events and contributors to space exploration and know some indirect benefits of the space program. (S4.11) • The student will recognize the positive and negative influences of the media on one's personal health choices. (H4.14)		• Describe some major events and contributors to space exploration and know some indirect benefits of the space program. (IV.A.3)		
As investigation through experiential methods.	• The student will share responsibilities and tasks and use materials in a safe manner. (S2.1) • The student will observe and describe changes that take place over time in both living and non-living things. (S2.2) • The student will record and describe information gathered from observations or measurements. (S2.4) • The student will make inferences after observations of an object or event. (S2.5) • The student will observe physical events and predict their outcomes. (S2.6) • The student will observe and describe simple changes in matter from one state to another. (S2.8) • The student will observe and discuss ways that eating affects activity and growth. (H2.11) • The student will conduct activities involving separation of combined materials (mixtures). (S2.14) • The student will share tasks and responsibilities and use materials in a safe manner. (S3.1)	• The student will make observations of dinosaurs, weather, and oceans. (S2.10) • The student will create hypotheses regarding dinosaurs, weather, and oceans. (S2.11) • The student will collect data on dinosaurs, weather, and oceans. (S2.12) • The student will create experiments from the study of dinosaurs, weather, and oceans. (S2.13) • The student will draw conclusions about dinosaurs, weather, and oceans. • The student will recognize and demonstrate the properties of matter. (S3.5) • The student will be able to identify and select tasks in a safe manner. (S4.1) • The student will be able to use the scientific method to solve problems. (S4.2) • The student will be able to identify, describe, and use electrical conductors, insulators, simple circuits, dry cells (energy sources), bulbs (energy receivers), and magnets. (S4.5)	• The student will recognize that all human beings grow and develop in a given sequence but that rates and patterns vary with individuals. (H3.21) • Observe and describe changes that take place over time in both living and non-living things. (I.A.1) • Select the appropriate instruments used to make measurements of length, weight, volume, temperature. (I.A.2) • Record and describe information gathered from observations and measurements. (I.A.3) • Make inferences after observation of an object or event. (I.A.4) • Observe physical events and predict their outcomes. (III.A.1) • Observe physical events and predict their outcomes. (III.B.1) • Conduct activities involving separation of combined materials. (III.B.3) • Describe and demonstrate some general characteristics of static electricity. (III.C)	• Predict whether light can travel through a variety of materials (solid, liquid, gas). • Predict differences in sounds that travel through a variety of materials (solids, liquids, and gas). • Predict the behavior of heated air. • Demonstrate separation of mixtures. • Demonstrate use of the six simple machines. • Predict adaptations of organisms which would be found in various biomes. • Construct a circuit using a battery, bulb, and wire which contains a switch and circuit-breaker. • Make and demonstrate an electromagnet using a battery and wire. • Describe the behavior of magnets. • Create a model of the earth's interior. • Create a model of the solar system. • Construct examples of the six simple machines. • Design and carry out an activity which proves that a dissolved solid is still in the liquid.	• The student will observe and describe changes that take place over a period of time in both living and non-living things. (2.5) • The student will record and describe gathered information. (2.6) • The student will make inferences after observations of an object or an event. (2.7) • The student will observe physical events and predict their outcomes. (2.8) • The student will conduct experiments involving separation of mixtures. (2.11) • The student will describe and demonstrate some general characteristics of static electricity. (2.12) • The student will observe and describe basic life stages of various things and demonstrate proper care and handling of them. (2.13) • The student will develop basic skills used in the scientific process. (3.2) • The student will use basic metric units of measurement in classroom and real world situations. (3.3)

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BLUE RIDGE ASSESSMENT PROJECT

Health/Science	Virginia SOL'S	Harrisonburg	Rockingham	Albemarle	Orange
	• The student will use basic metric units of measurement in classroom and real world situations. (S3.3) • The student will record and describe information gathered from first-hand experiences. (S3.4) • The student will infer the possible cause and effect of an event. (S3.5) • The student will identify the types of simple machines and demonstrate the use of each. (S3.9) • The student will understand that white light is a combination of many colors. (S3.10) • The student will describe the sun and demonstrate that it provides heat and light which are necessary for life on earth. (S3.11) • The student will observe and describe how animals behave in different ways to meet life needs. (S3.14) • The student will identify and select tasks and responsibilities and use materials safely. (S4.1) • The student will observe an object or event and make several inferences regarding the identity of the object or plausible reasons for the event. (S4.2) • The student will construct questions and answer them by collecting and interpreting data. (S4.3) • The student will conduct simple experiments in which only one variable is manipulated and all others are held constant. (S4.4)		• Observe and describe simple changes in matter from one state to another. (III.D.1) • Use the thermometer to measure heat. (III.D.2) • Identify the telescope as equipment used by astronomers. (IV.C.2) • Observe and classify objects into sets and subsets of similar characteristics. (I.A.1) • Use basic metric units of measurement in classroom and real world situations. (I.A.2) • Record and describe information gathered from first-hand experiences. (I.A.3) • Use seeds to demonstrate how new plant populations can be formed. (II.A.5) • Observe and describe how animals behave in different ways to meet their life needs. (II.B.1) • Describe and demonstrate some general characteristics of current electricity. (III.A) • Describe the sun and demonstrate that it provides heat and light which are necessary for life on earth. (IV.A.1) • Observe and investigate some of the general characteristics of stars. (IV.A.2) • Observe an object or event and make several inferences regarding the identity of the object or plausible reasons for the event. (I.A.1) • Construct questions and answer them by collecting and interpreting data. (I.A.2)	• Design, test, and evaluate separation methods for two different mixtures.	• The student will describe a given object's position and its direction of motion in relation to self. (3.4) • The student will identify the types of simple machines and demonstrate the use of each. (3.7) • The student will observe and describe how animals behave in different ways to meet their life needs. (3.12) • The student will use scientific process, including collecting data from simple experiments as a tool of problem solving. (4.2) • The student will select the appropriate tool, take a measurement, and report it using the appropriate unit. (4.3) • The student will name basic cloud formations and will record daily weather conditions using basic instruments of weather prediction used by meteorologists. (4.7)

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Health/Science	***Virginia SOL'S***	***Harrisonburg***	***Rockingham***	***Albemarle***	***Orange***
	• The student will use collected data to make inferences or predictions. (S4.5) • The student will select the appropriate tool, take a measurement, and report it using the appropriate unit. (S4.6) • The student will identify, describe, and use electrical conductors, insulators, simple circuits, dry cells (energy sources), and bulbs (energy receivers). (S4.7) • The student will observe basic cloud formations and will record daily temperature and precipitation over a short period of time. (S4.9) • The student will evaluate a personal diet in relationship to a balanced diet. (H4.15) • The student will know that plants and animals produce offspring that are alike in major ways but vary enough to be individuals. (S4.16) • The student will infer that solids, liquids, and gases are made up of tiny bits of matter called molecules and atoms. (S4.17)		• Conduct simple experiments in which only one variable is manipulated and all others are held constant. (I.A.3) • Use collected data to make inferences or predictions. (I.A.4) • Identify, describe, and use electrical conductors, insulators, simple circuits, dry cells (energy sources), and bulbs (energy receivers). (III.B.1) • Select the appropriate tool, take a measurement, and report it using the appropriate unit. (III.C) • Observe basic cloud formations and record daily temperature and precipitation over a short period of time. (IV.B.2) • Compare and contrast student's [atmospheric] observations with those of the media. (IV.B.3)		

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OUR ASSESSMENTS

Assessments and instruction are closely linked, yet assessment is more than and different from instruction. All instruction should be directed toward enhancing student performance toward achieving excellence. Assessment must measure something against a defined standard, and for most aspects of living and learning, real world standards exist. We can name world class athletes, doctors, authors, scientists, educators, and whittlers, and we can articulate what is world class about their work. These models of excellence serve as guides for all of us in education whether we're teaching subtraction in elementary school or research methods in graduate school. We are striving to enhance our students performance so they might one day make world-class contributions which are meaningful and valuable for themselves and for the greater good.

All of the assessments in this volume were written by teachers participating in the Blue Ridge Assessment Project, a collaborative effort of the Harrisonburg, Albemarle, Rockingham, Greene, Orange, and Fluvanna Schools. Teachers from these school divisions worked together in 1993-1994 to study, design and test assessment for classroom use. The focus of our efforts was to learn about the complexities of assessment in order to become better assessors.

Becoming assessors of student learning and progress is a process of development. Each of our participants came to this work with varying degrees of previous experience and knowledge about assessment. ***As such, our work, presented here, is an artifact of our efforts to become assessors. The assessments represent various levels of sophistication, complexity, and authenticity.*** The assessments include various forms and types including checklists, portfolios, performance tasks, product assessments, projects and simulations.

In becoming assessors, we've discovered that assessments evolve, that assessing is a process and that as assessors we must constantly be asking questions of our work, which tools to use and how to use them. Thus, we invite you to review our work and to use it as you see fit. We hope and expect our assessments will trigger ideas for you. We hope that as you become an assessor you will use our work in ways that make sense for your learners in your setting. Each of the assessments included here was piloted with children in the classroom of the assessment author. Many of the assessments were used by other teachers as well. Each assessment is also keyed to a curriculum analysis that shows commonalities between the Virginia SOL's and the local curriculum of the participating school divisions.

ORAL COMMUNICATION

by Barbara McKee

AGE LEVEL	Elementary, Middle or High School
TYPE	Checklist
FOCUS	Language Arts as oral communication skills, effective communications in conversation and discussion.

Language Arts

1.1	Communicate effectively in conversation and classroom discussion
2.1	Produce clearly the basic speech sounds
3.1	Participate in storytelling and choral reading
3.2	Paraphrase oral communication
4.18	Increase vocabulary through speaking experiences

Other curricular SOL's

Every grade level has an SOL that uses terms like:

Recite
Explain
Tell how and why
Identify different ways
Demonstrates courtesy
Actively participates
State in your own words
Give an example
Summarize

ASSESSMENT PURPOSE

_X_ Making instructional decisions

This assessment aids teachers, students, and parents in making informed decisions about what kind of reading material is appropriate for individual students. Filling out the checklist as students read, followed by questions to check for understanding, adults and students are able to see weak areas. From this they can make more informed instructional decisions and choose literature that is on the appropriate instructional level for the students.

_X_ Monitoring student progress in the classroom

By using this checklist three times a semester, teachers and parents are able to see improvement over time, or note where continued focus is needed.

___ Communicating and using summative evaluation

___ Monitoring student progress externally

_X_ Validating student achievement

This assessment also validates student achievement by recording progress over time and noting improvement in reading fluency and understanding.

___ Evaluating programs

___ Addressing Accountability

SETTING

This assessment was used in a classroom of 26 heterogeneously grouped students at third grade level. The classroom is set up to allow for active student participation. Students work together, work independently, and work with adult assistance. Two students receive Chapter I services and four students receive Learning Disabilities help. The less capable members of our class work together with assistance from their group.

The Harrisonburg City School's primary report card has two areas where oral communication is graded. Accountability is necessary for these areas, instead of "I haven't noticed any speaking problems for this child."

ADMINISTRATION

For Teachers

1. Prepare a "look-fors" chart and post it in the classroom.
2. Make sure the students understand the "look fors" and what is expected of him/her.
3. Make one copy of the teacher checklist for each student. Indicate which type of communication your are assessing at this time. (conversation, discussion, presentation, performance)
4. When using the teacher checklist, it is important to keep in mind the two essential requirements for observational assessment.
   - Several observations of each child should occur over a period of time to ensure that your observations are representative of the

child's overall ability. The observations may occur at random or may be based on time sampling.

- Observations should occur during different kinds of activities and in different settings. Some children respond better to formal assignments; others respond better when they can choose what they want to do.

5. The checklist, student survey, and parent response should be kept together to provide a picture of each individual's strengths and weaknesses.
6. Since the teacher checklist requires judgmental observations, the results can be used in planning follow-up activities designed to improve the child's attitude towards speaking.

For Learners

1. The look-fors are explained, discussed, changed, or written so everyone understands what is expected in good oral communication.
2. Students are given a student survey. It is important to stress that they should answer the questions as well and as truthfully as they can. However, they should not worry about getting the "right" answers. Their responses are not marked right or wrong.

LOOK-FORS

SPEAKING

Place these on a chart or the top of an activity page. Students should help write the look fors. However, they will probably be very similar to the ones listed.

1. Use of voice
   My voice is clear.
   I speak loud enough that I can be heard, but not too loud.
   I speak at the right speed so that I am understood.
2. I maintain eye contact.
3. I try to use new words when I am speaking.
4. I show courtesy to others in a conversation by taking turns, when appropriate.
5. I tell more about my topic when I am asked a question.

LISTENING

1. Pays Attention
   Eyes Watching
   Attentive
2. Posture
   Body on chair
   Hands Quiet
   Feet Quiet
   Mouth Closed
3. Process
   Concentrating
   Thinking
4. Analysis
   Elaboration
   Requests Information

SCORING

The scoring for this assessment is ongoing. The scoring standard I used is needs to improve, (N) satisfactory, (S) or excellent (E). The terms used in scoring could be changed depending on the activity. Since a checklist is being used, no final score is necessary. This assessment indicates strengths and weaknesses of individual students.

Scoring Standard:
C = Consistently uniform responses, stays with the same action, voice, etc.
I = Inconsistent changing form, response or action while being observed
N = Never

RECORD-KEEPING

The teacher keeps the checklist, the parent response form and the student survey to determine the student's progress. Comparisons over time are beneficial to monitor growth, to help make instructional decisions, and to communicate needs to parents.

PARENT INVOLVEMENT

1. The parents should fill out the parent's response form honestly and return it to school.
2. Results of the assessment will be discussed at parent-teacher conferences.

Look - Fors
In Speaking

Use on a chart or on the top of an activity page. Students should help write the *Look - Fors*. They should be similar to the ones listed.

1. Use of the Voice

Clear Voice	some words understandable	most words understandable	all words understandable
Appropriate Volume	too soft	just right	too loud
Appropriate Speed	too slow	just right	too fast

2. Maintains Eye Contact	never	sometimes	always
3. Elaborates on Topic	never	sometimes	always

4. Expands and Clarifies Topic

never — sometimes — always

5. Courteous-Takes Turns

monopolizes — sometimes shares speaking — takes turns

6. **Appropriate Expression

Body Movement-Gestures

never — sometimes — always

Vocal Expression

never — sometimes — always

Facial Expression

never — sometimes — always

****Criteria for presentation or performance**

Oral Communication Teacher Checklist

Name__________________________
Native Language__________________________

Grade_______
Second Language__________________________

Semester__________

Directions: Circle the appropriate rating for each oral communication skill. Write comments as needed in the space provided.

C=Consistent **I=Inconsistent** **N=Never**

Communication Skills	Date______ Comments	Rating	Date______ Comments	Rating	Date______ Comments	Rating
1. Use of voice						
Clear		C I N		C I N		C I N
Appropriate volume		C I N		C I N		C I N
Appropriate speed		C I N		C I N		C I N
2. Maintains eye contact		C I N		C I N		C I N
3. Elaborates on topic		C I N		C I N		C I N
4. Courteous speaker		C I N		C I N		C I N
5. Expands and Clarifies		C I N		C I N		C I N
6. Appropriate expression during presentation						
Vocal expression		C I N		C I N		C I N
Facial expression		C I N		C I N		C I N
Body movement, gestures		C I N		C I N		C I N

Student Survey Name__________________

1. Do you try to use new words when you are speaking?

never once in awhile sometimes most of the time always

2. Do you listen tolerantly and thoughtfully to what others are saying?

never once in awhile sometimes most of the time always

3. Do you respond to others' conversation?

never once in awhile sometimes most of the time always

4. Do you have a purpose before speaking?

never once in awhile sometimes most of the time always

5. Do you like to participate in

	Yes	No
Choral readings?	___	___
Book talks?	___	___
Plays?	___	___
Role-playing?	___	___
Discussions?	___	___
Presentations?	___	___

6. When you are speaking before a group, do you

	Yes	No
Have good eye contact?	___	___
Speak clearly?	___	___
Use proper gestures?	___	___
Stick to the topic?	___	___
Answer listeners' questions?	___	___

7. When you are having a conversation, do you

	Yes	No
Have good eye contact?	___	___
Speak clearly?	___	___
Take turns?	___	___
Stick to the topic?	___	___
Express your opinion?	___	___

8. What are your strengths as a speaker?____

9. As a speaker, what things do you need to work on?______________________________

____

10. What would you like to talk about

With the teacher?____

____

With a friend?____

____

In front of the class?____

____

With your parent or guardian?__________________________________

____

Parent Response
Oral Communication

Name______________________

At what times do you engage your child in conversation?

_____Breakfast
_____Lunch
_____After School
_____Supper
_____Evening
_____Before Bed

Has your child shown the ability to

	Yes	No
Maintain eye contact?	___	___
Use a clear voice?	___	___
Elaborate on a topic?	___	___
Take turns when speaking?	___	___

Has your child explained to you our project on speaking appropriately?

___Yes ___No

How would you describe your child's attitude toward speaking in front of a group this year?

___Positive ___Neutral ___Negative

How would you describe your child's attitude toward speaking in front of a group now?

___Positive ___Neutral ___Negative

I am interested in hearing any comments you would like to make, especially recommendations for improving and strengthening oral communication skills.

As we learn to be better speakers, your child should become more comfortable during conversation and when making presentations. The class is trying to speak clearly with appropriate volume and speed. They are learning to maintain eye contact and to be courteous during conversations and discussions. When making a presentation, students are trying to use appropriate expressions with their faces, voices and gestures.

Look - Fors
Listing Skills - in Class

Use on a chart or on the top of an activity page. Students should help write the Look - Fors. They should be similar to the ones listed.

1. Pays Attention

Eyes Watching The Speaker

____

Never **Sometimes** **Always**

Ears are Listening Attentively

____

Never **Sometimes** **Always**

2. Posture

Body is Erect
On the Chair

Never Sometimes Always

Hands are Quiet
On Your Desk

Never Sometimes Always

Feet are Quiet
Under Your Desk

Never Sometimes Always

Mouth is Closed

Never Sometimes Always

3. **Process**

Concentrate

Never Sometimes Always

Think

Never Sometimes Always

4. **Analyze**

Discuss the Topic with the Speaker ______________________________

Never Sometimes Always

Request More Information ______________________________

Never Sometimes Always

LISTENING SKILLS Teacher Checklist

Name________________________
Grade______
Semester_________

Native Language____________________
Second Language____________________

Directions: Circle the appropriate rating for each LISTENING SKILL . Write comments as needed in the space provided.

C=Consistent
I=Inconsistent
N=Never

SKILLS	Date_______ Comments	Rating	Date_______ Comments	Rating	Date_______ Comments	Rating
1. Pays Attention						
Eyes Watching		C I N		C I N		C I N
Attentive		C I N		C I N		C I N
2. Posture						
Body on Chair		C I N		C I N		C I N
Hands Quiet		C I N		C I N		C I N
Feet Quiet		C I N		C I N		C I N
Mouth Closed		C I N		C I N		C I N
3. Process						
Concentrating		C I N		C I N		C I N
Thinking		C I N		C I N		C I N
4. Analysis		C I N		C I N		C I N
Elaboration		C I N		C I N		C I N
Requests Information		C I N		C I N		C I N

Student Survey Name ______________________

1. Do you try to listen carefully to what the speaker is saying?

yes ______ no ______

2. Do you listen patiently and thoughtfully during discussion?

yes ______ no ______

3. Do you ask for additional information about the topic that is being discussed?

yes ______ no ______

4. Do you daydream or lose track of the topic when listening to a speaker?

yes ______ no ______

5. Do you like to listen to

	yes	no
Guest speaker?		
Teacher?		
Other children?		
Stories?		
Debates?		
Assemblies?		

6. When you are listening, do you

	yes	no
Watch the speaker?		
Keep hands and feet quiet?		
Sit correctly?		
Think?		
Keep your mind on the topic?		

7. When you are listening to a friend, do you

	yes	no
Have good eye contact?		
Participate in the discussion?		
Take turns?		
Think about questions to ask?		
Form an opinion?		

8. What are your strengths as a listener? ____________________

____

9. As a listener, what things do you need to work on? ________

____

10. What do you like to listen to

At home? ____

____

At school? ____

____

With a friend? ____

____

On the weekend? ______________________________________

____

*Remember: "Talking is sharing, but LISTENING is caring."

Parent Response Name ________________________

LISTENING SKILLS

At what times do you expect your child to be a good listener

Before school?	__________	Club meetings?	__________
During school ?	__________	Dinner?	__________
Church?	__________	Before bedtime	__________

Has your child shown the ability to

	Yes	No
Pay attention to a speaker?	_____	_____
Exhibit good posture when listening?	_____	_____
Think about what is being said?	_____	_____
Discuss a topic thoroughly?	_____	_____

Has your child explained the importance of being a good listener to you? Yes _____ No _____

How would you describe your child's listening skills?
Failure ___ Needs to Improve ___ Satisfactory ___ Outstanding ___

How would you describe your child's attention span? (ability to concentrate on a topic)
Failure ___ Needs to Improve ___ Satisfactory ___ Outstanding ___

I am interested in hearing any comments you would like to make, especially recommendations for improving and strengthening listening skills. _______

____

____

As we learn to be better listeners, your child should become better informed, better able to follow directions, and a better communicator. The class is learning to pay attention, exhibit good posture, process the spoken word, and analyze what they've heard. The children are trying to listen carefully to the teacher and to each other.

TASK ASSESSMENTS FOR RESEARCH AND REPORTING SKILLS

by June Battaile

AGE LEVEL	Primary to High School
TYPE	Product Portfolio
FOCUS	English Language Arts as Critical thinking

The students will develop skills for finding specific factual information in written material, creating meaning from it, and sharing their learning in written form. Besides fostering a "lifelong learning" skill, this research process allows the teacher an opportunity to authentically assess many Language Arts and one Social Studies SOL. The focus is on the series of steps from resource selection through rough draft. The "Animal Report Checklist" that follows lists the steps or "look-fors". The neatness, legibility, and illustrative quality of the final draft are important publishing tasks, but are not the focus of this assessment. Criteria for publishing tasks are included in a letter writing assessment found elsewhere in this publication.

Following are the SOL's that can be assessed through observation of this process and product. They are listed by the numbered sequence of the "look-fors" that they support:

1- Choosing an interesting, understandable book
  LA 3.3 The student will read independently with comprehension.
2- Finding written information (using strategies)
  LA 3.10 The student will use textbook aids and reference skills.
3- Creating an organizer
  LA 5.14 The student will organize information.
4- Record information (not sentences) in organizer
  SS 3.15 Students will use resource materials to compile information for reports.
  LA 2.5 The student will find and use factual information in reading.
5- Using organizer to write rough draft
  LA 3.9 The student will write brief fictional and nonfictional narratives.
  LA 4.10 The student will use the writing process to develop paragraphs.
  LA 4.14 The student will give orally and in writing clear, understandable directions and explanations
6- Revise, edit, proofread rough draft
  LA 3.8 The student will revise written work.
  LA 4.12 The student will edit and proofread written work.
  LA 6.4 The student will prewrite, write, revise, edit, and proofread compositions of more than one paragraph.

A seventh step would be recopying the reworked rough draft using a computer or neat, legible writing. This is supported by LA SOL's 7.7, 2.12, and 3.7. Criteria for this step can be found in the "Letter-Writing Assessment" in this publication.

There are many opportunities to observe LA 2.2, "The student will follow multi-step oral and written instructions," through this assessment.

ASSESSMENT PURPOSE

X Making instructional decisions

Observing process and product as students move through the sequence of tasks informs the teacher as to which skills need instruction and review either as a whole class or individually.

X Monitoring student progress in the classroom

The research and reporting process is a year long experience. Students will research many topics and report in brief and lengthy reports. After an initial introduction and practice period, students will be guided through the process with independence as the ultimate goal. When students feel that they are independently successful (or when the teacher thinks it is necessary), individual look-fors can be assessed and recorded in the scoring grid for the student (copy follows). It may be that the initial scoring process would only assess a few look-fors. NA (not assessed) can be entered into unassessed areas on the grid. Within 4-8 weeks, the student will choose another project to be assessed. When the teacher scores that project and records scores on the *grid, progress can be observed. This scoring is done with the student. Book choice, research questions, organizers, and researched information remain in a "units" spiral notebook. The rough draft, final copy (or copy of it) and checklist with teacher and student scoring are kept in the student's portfolio.*

_X_ Communicating and using summative evaluation *Derived from scoring on the grid and referring back to stored student materials) will be shared with parents during report period conferences. Students conferecne with the teacher more often than parents. The evaluation is reflected in the students' report card under the following subjects:*

Reading - Look-fors 1 and 2

Writing - Look-fors 3, 4, 5, and 6

___ Monitoring student progress externally

___ Validating student achievement

___ Evaluating programs

___ Addressing Accountability

SETTING

This assessment was tested in the third grade "extension" class of a 3-5 school using parallel-block scheduling. There were seven homeroom classes. One hundred forty-five of the 174 third grade students participated. Students receiving LD language services did not participate. This elementary school serves the entire rural county.

ADMINISTRATION

For Teachers

Often, but not always, research topics are determined by science, health, and social studies SOL's. In third grade one topic is animals with an emphasis on habitat. Before the students began searching for books, we brainstormed as a group the questions we wanted answered by our research. We then categorized the questions and arranged them for easy reference. The children developed these categories for animals: Body, Shelter/Habitat, Food, Activities, Babies. Each category and its questions were posted on a separate piece of paper on the wall to guide research (i.e. Body: color? texture? weight? shape? lenght? varieties? male/female differences?) In my situation it was necessary to provide a large number of books about many animals on varied reading levels. Our media center is not available for research, but I can check out books for my classroom. Our local public library allows about 36 books per topic to one teacher. I own many trade books on the topics we usually research. Ranger Rick, Zoobooks, and World supplement animal research. Groups of 25 students had over 100 resources to choose from.

Each look-for was modeled before children began. Students helped me formulate scoring criteria for each look-for after they became familiar with the task, and as I modeled each task I tried to closely approximate in play-acting what type of performance earned scores of 1-5. The first research projects required so much guidance that assessment was almost impossible for one person to do. Once most students could perform the look-fors independently, I visited with them individually to assess look-fors 1 and 2. By asking students to find answers to three or four specific questions, I could assess look-for 2. By asking them to read and summarize/answer I could assess look-for 1. It didn't take long and a grid is easily set.

Tasks 3-6 were assessed later based on information in spiral, rough draft, "Proofreading Checklist" and "Animal Report Checklist". The "Animal Report Checklist" is kept in the spiral notebook and students assess each task as it is performed. Students bring it to conference and store it later in their portfolio with the drafts. It is very difficult to get to all the children. It would help to have a parent or aide assess while you help students or visa versa. Maybe only half of your group will be assessed on 1 and 2 each time. Spiral notebooks are used for all prewriting and organizing. Looseleaf paper is used for rough and final draft (unless computer used). "Proofreading Checklist" and "Animal Report Checklist" are kept in students' portfolio.

Materials

*books appropriate for reading levels and topic interests

*spiral notebooks, pencils, stapler, notegbook paper for draft and final copy.

*"Report Checklist", "Proofreading Checklist", "Scoring Grid"

*tasks and criteria posted in class for student use

*research areas/questions posted

*dictionaries/thesaurus

*optional: computers and word-processing software printer

LOOK-FORS

For Research and Reporting

* = expected performance

= beyond expected performance

1) Student selected a book they found interesting and easy to comprehend.

#5 Shows unusual degree of interest in topic and selected book/comprehends in depth/interest drives search for more resources on same topic.

*4 Chooses a book about the topic/book is interesting to student/reads fluently and with understanding.

3. Make's a thoughtful decision/book on topic/interesting to student/can read most of the words, but book's too difficult for full comprehension.

2. Chooses a book about the topic/interested in it/has great difficulty reading the words.

1. May look at books/doesn't choose one/chooses one, but not about the topic

2) Student is able to find answers to report questions in selected book. (Strategies include: table of contents, index, pictures, headings, and titles.)

#5 Uses strategies to locate all information available/interest drives search for other resources/may assist others/able to apply strategies to new, more complex research materials/develops new strategies.

*4 Uses strategies to locate all available information/may assist others.

3. Uses table of contents, index, pictures, headings to find nearly all available information.

2. Beginning to use locating strategies, mainly picture search, finds a minor portion of available information.

1. Finds no or almost no information.

3) Student set up an efficient organizer in their spiral notebook.

#5 Organizer met all expectations and went beyond by demonstrating an inventive, yet practical feature, or student devised a new (to them) organizer of equal practical value.

*4 Neatly arranged organizer includes all subtopics from class-generated list/sufficient space for information.

3. All subtopics separated into areas, but either space is insufficient or care and neatness lacking.

2. Organizer attempted but has major flaw-topics missing, insufficient space, very messy, or illogical arrangement.

1. No or almost no organizer.

4) Student wrote short ideas from their book in the appropriate area of their organizer. (no sentences)

#5 Notes met all expectations and went beyond in their thoroughness, conciseness, and arrangement and phrasing for meaning.

*4 Notes are brief, clear as to meaning, located appropriately, and include all available information.

3. Notes are in appropriate areas/minor portion of available information omitted or unclear.

2. Some notes in all or most subtopics/may not be related to subtopic/may have used sentences/collected minor portion of available material/unclear.

1. No or almost no notes are in organizer.

5) Student changed organizer information into sentences arranged by topic into paragraphs. (rough draft)

#5 Met expectations and went beyond in verbal ability demonstrated in converting ideas into sentences, combining ideas, and/or creating unusually well-sequenced, thorough, and focused paragraphs.

*4. Draft arranged into paragraphs about separate topics/sentences complete and grouped logically/all organizer information present.

3. Majority of organizer information in draft/minor omission of information, only one paragraph, or small number of incomplete sentences.

2. Draft contains elements of organizer but is missing majority of information, sentences are incomplete, or no paragraphs in evidence.

1. No or almost no attempt at rough draft.

6) Student proofread rough draft and made changes as suggested by checklist if needed.

#5 Met expectation and went beyond in effort and patience with improving draft-may have sought peer input/perhaps used thesaurus or dictionary/unusual motivation to improve spelling, wording, and punctuation.

*4 Draft was reread/checklist attached/evidence of three or more improvements in punctuation, wording, or spelling.

3. Draft reread/checklist attached/evidence of one or two improvements.

2. Draft was reread/no checlist attached.

1. Draft wasn't reread/checklist not attached.

RECORD-KEEPING

Teacher

Record assessments on "Teacher Scoring Grid". Copy reports for portfolios. Guide and supervise storage of research data in portfolio.

Students place spirals (topic/organizer/notes), rough draft, checklists/final copy in portfolio.

PARENT INVOLVEMENT

1. Send a note home before the start of the research and reporting project explaining the topic, look-fors, scoring, and benefits to their child. Enclose a copy of the report checklist.

2. Seek volunteers to come to school and help guide students toward expected performance on look-fors. Parents could score as well. Making the library trip to collect a batch of books on the topic and bringing resources from home would be a good help too.

3. Encourage parents to check out or purchase non-fiction trade books on subjects of interest to their children. Help them understand how to tell when their child is reading at a comprehension level so that they will select appropriate resources. Suggest basic book-making supplies (stapler, paper, pencil, crayons) be kept handy for children to make books about their interests.

4. Suggest ways parents can participate in this learning process. Parent and child can research the same subject together, adding to the same organizer from different resources. Parents can help their child become more aware of what interests them the most simply by making a comment like, "You have talked about that fish a lot this morning. You may have a special interest in sharks. Would you like to go to the library and see if they have any books about shares?"

5. Send home a questionaire to parents to see if they have noticed their child exhibiting any of the look-fors at home. You could ask: "Have you noticed your child reading more at home lately? Has your child used a table of contents, glossary, index, or dictionary in your presence or discussed them? We have been researching animal in class. Has your child told you any information about a specific animal? If so, what?"

6. Videotaping the class during the research and reporting process provides home entertainment for each child to take for an overnight. Parents would really see the "picture" then.

7. Sharing a booklist and displaying examples of age appropriate non-fiction trade books during conferences steers parents towards some good choices. Perhaps a local bookstore would allow a discount to parents from your class purchasing non-fiction children's books.

Name ______________________________ Date ________________

ANIMAL REPORT CHECKLIST

Sunburst Very Well *Star* OK *Quarter-moon* not sure, may need help

Teacher Score	Student Score	
________	________	1. I chose a book I am interested in and I understand.
________	________	2. I can find the answers to report questions by using the table of contents, index, or by reading through the book and looking at pictures.
________	________	3. I created (in my spiral notebook) a way to organize and write the information I find in my book. (The method is called an "organizer")
________	________	4. I entered words and short ideas from my book into the "organizer." (no sentences)
________	________	5. I wrote a rough draft by reading my "organizer" and changing the information into sentences and paragraphs. (a paragraph for each main idea)
________	________	6. I proofread my rough draft, filled out the Proof-reading Checklist, and stapled it to the draft.

I did each task for this report as well
as I could and I thoughtfully chose the
most true symbol to place on each line.

signed ______________________________

Research and Reporting Scoring Grid

Student's Name ____
na=not assessed at this time

Topic:						
LOOK-FORS DATE						
student selected a book they found interesting and easy to comprehend						
student is able to find answers to report questions in selected book						
student set up an efficient organizer in their spiral notebook						
student wrote short ideas from their book in the appropriate area of their organizer						
student changed organizer information into sentences arranged by topic into paragraphs (rough draft)						
student proofread rough draft and made changes as suggested by checklist if needed						

PROOFREADING-----ROUGH DRAFT CHECKLIST (Animal Report)

Name ______________________________

Date ______________________________

Place a check on the first line in front of each item that you have done. (___ ___)

___ ___ 1. I have reread my paper to be sure it makes sense.

___ ___ 2. I have put a period (.) at the end of each sentence. (wherever I come to a full stop).

___ ___ 3. I have put a question mark (?) at the end of each question.

___ ___ 4. I have begun all sentences with a capital letter. (The)

___ ___ 5. I have begun all names of persons or places (proper nouns) with a capital letter. (Dyke)

___ ___ 6. I have circled the words that I think may be misspelled. kat

___ ___ 7. I checked for correct spellings of circled words in a dictionary, glossary, or with a friend. kat cat

___ ___ 8. I indented at the start of each paragraph.

Research and Reporting Evaluation

Name ________________________________

1. How do you know if you understand a book?

2. What is your favorite way to find information in a book? Why?

3. Could anyone else write a good rough draft by using your organizer? Why or why not?

4. Share any tricks you do to make short, easy-to-read notes in your organzier.

5. What do you enjoy most about research and reporting? Least?

6. If you could report on anything and there were plenty of interesting, easy-to-read books to choose from, what topic would you choose: Why?

READING WITH FLUENCY AND UNDERSTANDING

by Jennifer Herr Drescher

AGE LEVEL Early and Upper Elementary

TYPE Performance, Checklist, and Portfolio

FOCUS Language Arts as comprehension skills, creative processes, critical thinking, process skills and story concepts

Language Arts

1.4 Demonstrate beginning oral reading skills.
1.7 Develop comprehension skills.
2.5 Find and use factual information in a reading selection.
2.6 Identify sequence of events.
3.3 Read independently with comprehension.
3.4 Find the main idea when it is stated in a reading selection.
3.6 Use word attack skills to read and understand the meaning of words.
3.12 Draw conclusions from information obtained from oral or written materials.
4.3 Identify details which support the main idea
4.6 Use context clues to aid comprehension
4.9 Identify and describe the setting, characters and plot in stories
4.18 Increase vocabulary through reading, writing, speaking and listening experiences.
5.2 Determine the main idea when it is implied in a reading selection.
5.3 Determine logical relationships found in reading selections.
5.5 Understand the meanings of new works within the text.

ASSESSMENT PURPOSE

X Making instructional decisions

The purpose of this assessment is to aid teachers, students, and parents in making informed decisions about what kind of reading material is appropriate for individual students. By filling out the checklist as students read, followed by questions to check for understanding, adults and students are able to see weak areas and can make more informed instructional decisions and choose literature that is on the appropriated instructional level for the students.

X Monitoring student progress in the classroom

Monitoring student progress in the classroom is also the purpose of this assessment. By using this checklist three times a semester, teachers and parents are able to see improvement over time, or note areas that need improvement.

___ Communicating and using summative evaluation

___ Monitoring student progress externally

X Validating student achievement

This assessment also validates student achievement by being able to look at progress over a years time and note improvement in reading fluency and understanding.

___ Evaluating programs

___ Addressing Accountability

SETTING

This assessment was initially used in a classroom of 21 heterogeneously grouped students a third grade level. One student spoke English as a second language. Two students received learning disabled services from a resource teacher. Four students were Chapter I students. The Chapter I teacher comes into the classroom and assists the four students in following the classroom teacher's plans. The school is the oldest of four elementary schools in a rural community of approximately 30,000 residents. Approximately 450 students attend the school.

ADMINISTRATION

For Teachers

The student brings self-selected reading material to the reading conference with the teacher or the teacher may choose the reading material. The teacher chooses a passage for the student to read and may also ask the student to choose a passage. The teacher marks the checklist on fluency while the student is reading. Following the reading the teacher asks the student questions from the question sheet that she/he chooses to best demonstrate the student's understanding of the passage that was read. Extra blanks are on the checklist to write in questions asked. The teacher should make notes of what questions were asked during the questioning period and the student's understanding of the questions. The teacher may choose to make comments in the comments area of the checklist during the conference or at a later time. The teacher might comment on the type of errors made during reading or during the questioning time, the behaviors of the child during the conference, or on the appropriateness of the material being read. Notes on materials or instructional ideas might also be noted in the comment section. A copy of the cover of the book and a page from the book will be included with the assessment in the student's portfolio.

LOOK-FORS FOR TEACHERS

For Fluency

1. Student (I) read without pausing often to figure a word out.
2. Student (I) did pause for a period or comma.
3. Student (I) read with expression for a ! or a ?.
4. Student (I) read at an acceptable rate of speed.
5. Student (I) substituted words that made sense.

For understanding

1. Student (I) went back and corrected for meaning.
2. Student (I) changed voice when a character was speaking.
3. Student (I) can stop and predict what will happen next.
4. Student (I) demonstrates understanding of story: (see attached sheet for questions).

For Learners

Together as a class the students and teacher discuss the Look-Fors. The look-fors are posted in the room and referred to often. The students become familiar with the look-fors and come to understand what they mean through discussion and use. The students use the look-fors as they assess themselves by recording their reading on tape. The students either self-select a book or the teacher may select it for them. The student then reads a part of the book or the whole book on to the tape. The student either self-assesses or the student and teacher may listen to the tape and assess it together. The tape may then be sent home for assessment by the parent. The assessment of the taped reading may become part of the portfolio.

LOOK FORS FOR LEARNERS

For fluency:

1. I often paused to figure out a word.
2. I did pause when there was a period or comma.
3. I read with the right expression when I saw a ! or a ?.
4. I did not read too fast or too slowly.

For Understanding

1. I changed my voice when a story character was talking.
2. If something didn't make sense, I went back and tried to change it.
3. I can retell the story in my own words.
4. I can stop and guess what will happen next.

RUBRIC

No rubric is used in this assessment. Rather a checklist is used to determine student progress, make instructional decisions, and validate student achievement.

SCORING

The scoring for this assessment is ongoing. No final or absolute score is required, rather each time the student is assessed, the assessment becomes part of the whole picture of what the child is capable of doing. The assessments may be compared over time to note progress. However, because there is no final score, parts of the assessment may be compared to one another thus making it more specific for the child in question.

RECORD-KEEPING

The teacher will use the teacher checklist for record-keeping. It is advised that this assessment be done at least three times a semester. Some may choose to use it during the weekly conference. The checklist may be kept in a three ring binder along with other record-keeping items. Included in the record-keeping is the students self-assessment of the taped reading and the parent checklist.

PARENT INVOLVEMENT

Dear Parents,

I hope that we can become partners as we watch your child grow as a reader this year. During this process there are certain reading behaviors that we all look for. Included on the attached checklist are things that we as adults and the students can "Look-for" to measure reading progress.

Please take some time to read with your child and fill out the checklist using as many of the look-fors as you would like. You may want to focus on 2-3 look-fors now and several others at another time. You may also have a tape of your child to listen to that both your child and I will assess with the same checklist.

As you listen to your child read, remember to be supportive and encouraging to them. Reading is a process and no matter where your child is now, we want to help them to move forward.

After you have filled out the checklist, discuss it with your child. The children are also aware of what to look-for in reading progress. They have or will have an opportunity to use the same look-fors in scoring themselves by listening to a tape of their reading.

Your assessment of how your child is reading is important to me as I gather data to plan my future instruction. Therefore, I will be asking you to fill the checklist out two more times this year. Please return this checklist by __________.

Thank you for your support and involvement in the learning process of your child.

Sincerely,

Jen Drescher

Reading Fluency and Understanding

Name______________________ **Grade**__________ **Teacher**____________________

Objective: The student will read with fluency and understanding.

Look-Fors: Fluency	**Usually**	**Sometimes**	**Rarely**	Date: Book:	**COMMENTS** Date: Book:
Student read without pausing to figure out a word.					
Student did pause when there was a period or comma.					
Student read with correct expression for ! or a ?.					
Student read at an acceptable rate of speed.					
Student substituted words that made sense.					
Look-Fors: Understanding					
Student went back and self-corrected for meaning.					
Student changed voice when a character was speaking.					
Student can stop and predict what will happen next.					
Student demonstrated understanding of story: (see attached sheet).					

My Child As A Reader
Parent Assessment

Student Name ______________________ Date ____________

Book read/tape listened to ______________________

Teacher ______________________

Look-Fors: Fluency	Usually	Sometimes	Rarely	COMMENTS
Reads without pausing.				
Pauses when there is a period or a comma.				
Reads with the right expression when an ! or ? is used.				
Does not read too fast or too slowly.				
Look-Fors: Understanding				
Stops and predicts what will happen next.				
If something doesn't make sense, rereads to make sense.				
Retells the story in his/her own words.				
Changes voice when a story character is talking.				

Parent Signature ______________________

Taped Reading Assessment

Name ______________________________ Date______________

Title ________________________ Author ________________

Look-Fors: Fluency	**Usually**	**Sometimes**	**Rarely**
I read without pausing often or stumbling over words.			
I did pause when there was a period or comma.			
I read with the right expression when I saw an ! or ?.			
I changed my voice when a person was talking.			
I did not read too fast or too slowly.			
Look-Fors: Understanding			
I tried to figure out a word when I got stuck.			
If something didn't make sense, I went back and tried to change it.			
I could retell the story in my own words.			

My Comments:

Teacher's comments:

Retelling:

Thinking About my Reading/Response Questions

About the Author

1. Why do you thing the author wrote the book?
2. What is the author trying to tell us?
3. What do we learn about the personality or the interests of the author?
4. What did the author have to know to write the book?

Characters

5. What kind of people are the main characters?
6. Do you like/dislike them? Why?
7. Why are they important in the story?
8. Why did they behave as they did?
9. Do you know anyone like them? In what ways are they alike?
10. How do they change throughout the story?
11. How are the characters in the story alike/different?
12. Was the behavior of a character right or wrong?

The Story

PLOT

13. What happened in the story?
14. What might have happened if a certain action had **not** taken place?
15. Were you able to predict certain parts? Why could/couldn't you predict?
16. What other way might the story have ended?
17. Which chapter do you think is the most important to the story? Why?

SETTING

18. Where did the story take place? What was it like?
19. Could there actually be a place like this? Do you know of a place like this?
20. When did the story take place? (past, present, future) How can you tell?
21. Which part of the story best describes the setting?
22. Where in the story does the writer create the atmosphere for the setting?
23. Are there any particular words that create this atmosphere?

MOOD

24. How did you feel while reading this book? Why did you feel that way?
25. What was the saddest/funniest/most exciting/unusual/mysterious incident?
26. How did the author make you feel the way you did?
27. Does the mood of the story change? How?

STYLE

28. How did the author describe the characters?
29. Were there any unusual ways of saying things?
30. Does the author give you enough information?
31. How does the author keep you interested/or lose your interest?
32. What special words does the author use to help you see, smell, taste, feel, hear?
33. What "pictures" has the author's writing left in your mind? (not pictures on the pages)
34. What strengths does the author have? What do you like about his/her style?

READING FOR INFORMATION

by Marida Lamb

AGE LEVEL	Early Elementary
TYPE	Performance Task
FOCUS	Language Arts as Research Skills

Language Arts

3.10 The student will be able to use textbook aids and reference sources to locate information.

1.10 The student will communicate ideas in written form.

Our goal is to gather information when we read. Later on in the year, we will expand to investigating what we read to demand verification.

ASSESSMENT PURPOSE

X Making instructional decisions
___ Monitoring student progress in the classroom
___ Communicating and using summative evaluation
___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

SETTING

The setting is Nathanael Greene Elementary School in Rural Greene County. There are approximately 540 students in grades 3-5. This third grade classroom consists of a group of 24 children with varied abilities.

ADMINISTRATION

For Teachers

This assessment could be done in conjunction with a unit of study or within language arts. A teacher might develop a file of question sheets to accompany many books commonly used in the classroom. Books at a variety of levels, covering a variety of topics are ideal. This assessment looks specifically at reading for information. As a child progresses, reading for information is likely to progress beyond one book to many sources. Specific teacher directions include giving each child a page of questions. As an example the questions for Tomie de Paola's book, The Popcorn Book are provided here.

LOOK-FORS

1. I read the questions.
2. I read the book all the way through, looking for the answers.
3. I try to get the answers by reading the words, and looking at the pictures and re-reading.
4. I read the book again to find answers that were hard to find out.
5. I asked for help after I tried on my own three times.
6. I tried to find the answer in more than one place.
7. I answered each question completely.

SCORING

5	Unusually high persistence and focus on excellent work. Consistently works through all questions. Does not give up on hard-to-find information. Realizes there are questions that this book may not provide an answer for.
4	Student puts forth high effort; perseveres through questions until seven are answered. asks for help after giving best effort.
3	Student is persistent enough to answer the easiest questions, but does not put forth effort on the more difficult ones. Five or six questions are answered.
2	Student show persistence some of the time, inconsistently. Gives up easily. Three or four questions answered.
1	Student puts forth no or little effort. Lack of persistence was a block to answering questions. Only one or two questions answered.

What Do I Know About Popcorn?

1. Where does popcorn come from?

2. Who told the Pilgrims about popcorn?

3. Where is the most popcorn grown?

4. What are unpopped kernels called?
   Why don't they pop?

5. What other kinds of corn are there?

6. Draw a picture showing one of the earliest ways to pop corn.

7. Something I want to know or a question I'd like to ask.

8. How could you use corn to make a friend?

LANGUAGE ARTS PORTFOLIO ASSESSMENT

by Joan Hutchens and Second Grade Team of Teachers

AGE LEVEL Elementary
TYPE Portfolio
FOCUS Assessing for student instructional needs in the Language Arts area by maintaining a portfolio.

ASSESSMENT PURPOSE

X Making instructional decisions
X Monitoring student progress in the classroom
___ Communicating and using summative evaluation
___ Monitoring student progress externally
X Validating student achievement
X Evaluating programs
X Addressing Accountability

SETTING

The assessment is used by a team of five second grade level teachers in a rural school. Each class contains approximately twenty-one students heterogeneously grouped. The classes all contain some students who are served by Chapter I and/or the Learning Disabled programs.

ADMINISTRATION

For Teachers

The entire Language Arts' assessment is given by each classroom teacher at the beginning, middle, and end of the school year. During the year, the students add their own samples of work with a brief explanation of it's choice to the total portfolio. At alternate grading periods, the students are asked to fill out a personal evaluation sheet which is added to the portfolio. Thus, the Language Arts Portfolio contains three teacher assessments and the child's choice of work samples throughout the year as well as the child's personal assessments.

The Language Arts Assessment consists of the administration of the following by the teacher:

1. Spelling: leveled lists of words are given to the class. Testing is continued to the next level list as long as the child spells fifty percent of the words correctly.
2. Word Study Patterns: From the spelling errors made, the teacher determines the word patterns needed for instruction.
3. Word recognition in isolation: highest level of word list that a child says seventy percent of the words correct.
4. Oral Reading level is determined by the highest level at which the child reads a one-hundred word passage with ninety-five percent accuracy.
5. Oral Reading Comprehension level: is determined by the highest level at which the child answers seventy percent of the questions correctly after reading the passage.
6. Silent Reading Comprehension level: is determined by the highest level at which the child answers seventy percent of the questions correctly after reading the passage.
7. Writing: a writing sample is taken from the child and scored holistically. (Domain scored)
8. Handwriting: a handwriting sample is taken from the child and evaluated by observing neatness, spacing and letter formation.

Materials

1. Pocket folder for each child to use as portfolio
2. Cover sheet for recording assessments and comments
3. Index cards for children to write explanation for inclusion of work sample in portfolio
4. Student self-assessment sheets
5. Sample Informal Reading Inventory of reading leveled word lists and passages with questions.
6. Leveled spelling lists

For Learners

1. My portfolio shows what I have learned this year.
2. My portfolio contains three self assessments that reflect how I feel about my progress.
3. My portfolio contains at least three samples of my work completed during the year.

LOOK-FORS

Through the use of the portfolio, the child shows continued improvement over the period of the year in the area of Language Arts. The portfolio offers a continuous snapshot of the child's development in the areas of Language Arts.

Standards set by teachers - the following set of standards were determined by the team, instruction occurred based on these concepts followed by the assessment given at the three intervals during the year.

Writing Process, English and Spelling

1. Using correct format
   a. heading
   b. skipping lines
   c. title - proper capitalization
2. Sentence formation
   a. begins sentence with capital letter (SOL 2.14)
   b. use of correct ending punctuation (SOL 2.14/VLT)
   c. correct word order within a sentence
   d. expanding basic sentences by combining short sentences (SOL 2.14)
3. Mechanics
   a. use of developmentally appropriate spelling (SOL 2.11)
   b. showing one paragraph - indentation, main idea, and details (SOL 2.9/VLT)
   c. capitalizing proper nouns
   d. avoiding random capitalization (VLT)
   e. legible manuscript writing (SOL 2.12)
4. Usage
   a. proper use of singular and plural forms of nouns and verbs
   b. subject-verb agreement
   c. proper use of pronouns
   d. use of I and me
   e. avoid overuse of AND (VLT)
5. Style
   a. apparent 'voice' of the child (SOL 2.13 and 2.16)
   b. use of developmentally appropriate vocabulary to show imagery and vividness (SOL 2.8)
6. Composing
   a. main idea supported throughout (SOL 2.9)
   b. organized beginning, middle and ending (SOL 2.15)
   c. elaboration of the main idea (SOL 2.14)

Focus Correction Areas
(for second grade writing)

1. Proper heading
2. Sentences that make sense
3. Begin sentences with a capital letter
4. End sentences with appropriate punctuation
5. All sentences relate to a main idea
6. Sentences in proper sequence
7. Use of colorful, descriptive words
8. Expand simple sentences to compound sentences (SOL 2.14)
9. Use of developmentally appropriate spelling and vocabulary (SOL 2.10)
10. To write a paragraph (SOL 2.9)
11. Legible manuscript handwriting (SOL 2.12)

WORD SKILLS
(SOL's 2.4, 2.8, 2.10)

EXPANSION AND USE OF VOCABULARY

Wordsorts:

Identify beginning consonants
Word families
Short vowels
High frequency short vs. long vowel patterns with some beginning blends
Low frequency vowel patterns with some beginning blends and ending consonant units
Consonant doubling with suffixes
Consonant doubling with suffixes and single morphemes
One syllable open/closed and two syllable open and closed (From Nelson-Gill JMU Reading Center)

IDENTIFY WORD RELATIONSHIPS

Identification and use of:

Compound words
Contractions
Synonyms, antonyms, homophones
Multiple meanings
Classification
Affixes (Prefix and suffix, comparatives and superlatives, possessives, verb/noun inflections, spelling changes)
Context clues

COMPREHENSION
(SOL's 2.4, 2.5, 2.6, 2.7, 2.11)

INTERPRET INFORMATION

Predict outcomes
Draw conclusions
Paraphrasing

RECOGNIZE LOGICAL RELATIONSHIPS

Sequence

- Cause and effect
- Problem and Solution

ELEMENTS OF FICTION

- Character traits
- Setting
- Plot
- Character goals

ELEMENTS OF NONFICTION

- Topic
- Main Idea
- Details

STUDY SKILLS
(SOL's 2.2, 2.5, 2.17)

USE OF ALPHABETICAL ORDER

- First letter
- Second letter

ORGANIZE AND RECALL INFORMATION

- Likenesses and differences

APPLY INFORMATION

- Follow directions

USE CONTENT-AREA TEXTS

- Title page
- Table of contents
- Index
- Glossary
- Maps

SCORING

Scoring is done as basic to an Informal Reading Inventory as described earlier for the teacher assessment. Writing samples are scored in domains. Handwriting is judged for neatness, spacing and correct letter formation.

RECORD-KEEPING

A cover sheet is filled out three times a year by the teacher.

The child fills out a self-evaluation sheet at least twice a year.

An individual checklist of second grade Language Arts' skills is kept by the teacher.

PARENT INVOLVEMENT

Portfolios become an important reporting tool of pupil progress during parent-teacher conferences. Parent comments may be added to the portfolio.

STUDENT INVOLVEMENT

The student meets with the teacher in a conference for the portfolio, the student adds pieces of work to his/her portfolio with written reason on index card for inclusion attached, and the student adds the self-evaluation at least twice a year to the portfolio.

Third Grade Teacher______________________________

Second Grade Assessment

Name ____________________________ Age _______ Second Grade Teacher________________

Language Arts Assessment

Test	September	January	May
Spelling List Level Sense of Word			
Word Recognition in Isolation Dolch Grade leveled list			
Word Recognition in Context Oral Reading Level Oral Reading Comprehension Level			
Silent Reading Comprehension Level			
Writing			
Handwriting			

COMMENTS-

DOMAINS AND SCORING RUBRIC FOR PAPERS

The following domains of writing were used for scoring your paper. This will be a constant for scoring written work for this course.

Composing - The writer focused on structuring and elaborating to construct an effective message for the reader. The paper is crafted to present a message that is well organized. Features are:
Central idea
Elaboration
Unity
Organization

Style - The writer purposefully shaped and controlled language, focusing on rhythm, vividness, and specificity. Features are:
Selected vocabulary
Sentence variety
Tone
Voice

Sentence Formation - This domain reflect the writer's ability of form competent sentences to form his/her thoughts. Features are:
Completeness
Standard word order
Expansion and embedding with modifiers

Usage - The writer's word level features written language that is appropriate and acceptable for standard discourse. Features are:
Standard agreement
Word meaning
Conventions
Standard inflections

Mechanics - The writer includes the standard system of symbols and cuing devices to help readers make meaning. Features are:
Capitalization
Punctuation
Formatting
Spelling

WRITING

Scoring Rubric for each Domain

4 = Consistent, not necessarily perfect, but controls most of domain's features

3 = reasonable, but not consistent, control of most domains

2 = inconsistent control of several features

1 = little of no control of most domains's features

DOMAIN	SCORE
COMPOSING	
STYLE	
SENTENCE FORMATION	
USAGE	
MECHANICS	

Student Self Evaluation

Name ______________________________ Date __________

1= Very Good 2= Pretty Good 3= Not So Great

Subject	Rating	Comments
Reading class		
Silent Reading at School and at home		
Math class		
Spelling		
Handwriting		
Daily Edit		
Writers' Workshop		

1= Very Good 2= Pretty Good 3= Not so Good

BEHAVIOR	RATING	COMMENTS
Following Rules		
Working Quietly		
Getting along with others		

WORK HABITS	RATING	COMMENTS
Getting Right to Work		
Turning in assignments		
Organizing desk and materials		

One thing I am especially proud of ______________________

____

One thing I want to work hard to improve ______________________

____

My teacher could help me by ______________________

____

Mom/Dad could help me by ______________________

ASSESSMENT FOR READING WORKSHOP

by Jennifer Herr Drescher

AGE LEVEL Early and Upper Elementary
TYPE Performance and Portfolio
FOCUS Language Arts as creative process, critical thinking, and process skills

Language Arts
3.1 Participate in story telling and choral reading
3.3 Read independently with comprehension.
3.12 Draw conclusions from information obtained from oral or written material

Reading Workshop is developmentally appropriate for early and upper elementary students. Learners are allowed to select their own literature and make decisions about how they will respond with the teacher's support through conferences. Students must learn to be responsible during their work time and to choose literature that is appropriate for them, with teacher guidance when needed. Therefore, the teacher needs to spend a significant time initially to set up their workshop atmosphere and to teach the routines and behaviors of the workshop. Students will be taught many ways of responding to literature and will then be able to choose a response or create their own. Examples of responses include doing a Book Talk, acting out a section of the story, poem or play, making a poster to sell the book, creating a new cover for the book, and many, many more. Their responses should show insight, feeling, perception and creativity. Students work individually or in groups to make responses.

ASSESSMENT PURPOSE

_X_ Making instructional decisions
A teacher uses the data from this assessment to adjust instruction for individual learners and groups by reviewing the processes and products to the assessment on a regular basis alone and with the reader.

_X_ Monitoring student progress in the classroom
A teacher uses the data from this assessment to monitor student progress by reviewing the process and products of the assessment on a regular basis alone, with the reader and the reader's parents.

_X_ Communicating and using summative evaluation
Data from the checklist and portfolio are used to report progress at given reporting periods.

___ Monitoring student progress externally

___ Validating student achievement

_X_ Evaluating programs
Teachers supervisors or administrators could collect data from various teachers and classrooms to assess the strengths and weaknesses of reading workshop as an instructional strategy for language arts. Data, kept in folders could be compared to anticipated progress.

___ Addressing Accountability

SETTING

This assessment was initially used in a classroom of 21 heterogeneously grouped students at third grade level. Two students spoke english as a second language. Two student received learning disabled services from a resource teacher. Four students were Chapter I students. The Chapter I teacher comes into the classroom and assists the four students in following the classroom teacher's plans. The school is the oldest of four elementary schools in a rural community of approximately 30,000 residents. Approximately 550 students attend the school.

ADMINISTRATION

For Teachers

The Reading Workshop lasts one hour and twenty minutes. It begins with a 15-20 minute mini-lesson with the class gathered at the carpet. During this time the teacher shares different literature with the students, goes over routines, logistics, or teachers skills, and strategies. Next is a 25-30 minute period of Sustained Silent Reading (SSR). During this time the children are reading books of their choice and the teacher is holding reading conferences with individuals. After SSR the children self-select books and respond to them as well as complete work study assignments and any other tasks the teacher has given, i.e. literature log responses. Students are also involved in group and individual conferences with the teacher. The workshop ends with a 15 minute sharing time at the carpet where 2-3 students share their responses to literature they have read. *Good resources for reading workshop are Read-on by David Hornsby and Creating Classrooms of Authors by Carolyn Burke, Jerome Harste, and Kathy Gnagey Short.*

The Look-Fors for student responses are posted in the room and discussed in depth with the students. The grading scale and rubrics are also posted and discussed. Each student is expected to give a teacher evaluated response at least once every six weeks. The student decides what response is evaluated, by letting the teacher know at least three days in advance using the response planning sheet. The teacher evaluates the student and the student also evaluates his/her own response. Both teacher and student use the response planning sheet in the packet. The teacher shares her evaluation with the student. A chart is kept in the room for the students and the teacher to monitor and record the completion of their responses. The teacher evaluation and the student self-assessment are shared with the parent in conferences or through the portfolio.

Materials

- A class library of 400-500 books either teacher-owned, borrowed from libraries, or from the school trade book library. Having a sufficient amount of books is a **must** in an individualized reading program.
- A reading folder for each student for their *Reading Record* chart, *Conferences Attended* sheet, and *Responses Given* sheet.
- Literature response logs
- Notebooks of poems collected by the students
- The teacher may want to use a three-ring binder to record conference notes, books that students are reading and teaching points to consider.

For Learners

For Reading Workshop to run smoothly the students must be as well organized as the teacher. Each student has a reading folder which contains a Reading Record Chart and Responses Given Sheet. The Reading Record Chart is for students to fill out as they read. The Responses Given Sheet helps them keep track of what responses they have given and when.

To help students keep track of their daily work, the teacher lists on the board the tasks that are to be completed in order of priority. Students learn to check the board as they finish each task. When tasks are finished students have a time of choice when they are free to explore books and work on responses.

Modeling responses is important in helping the students understand what is expected of them. Periodically the teacher can model different response during the mini-lesson time of the Reading Workshop. As each response is modeled, the students and teacher look at the planning and response look-fors and informally score the teacher. This helps students internalize the look-fors and better understand how to score them.

Initially the teacher may want to present the planning and response assessment forms as checklist. As the students become more competent in their responses and better able to understand the quality of their work, the teacher could move into using the rubric with the four point scale.

LOOK-FORS

For planning

1. I used a planning sheet.
2. I wrote down my ideas to each of the questions.
3. My responses showed the main idea of the book.
4. I listed all the materials I would need.
5. I chose a response idea that is creative for me.

For reading response:

1. I shared the main idea of the book so others would know what it was.
2. I shared why I chose the book.
3. I gave at least two examples of what I liked and did not like about the book.
4. I shared my feelings about the book.
5. I brought all the things I needed to give my response.

RUBRIC

4 = I did my very best. I thought about what I was doing and saying. I took my time and did my best work so others could understand

what I planned and shared. My work was creative. I shared about the book with more than two examples, including my feelings about the book and the book's main idea.

3 = I did well. I did everything that was asked of me. I gave one or two examples of what I liked or didn't like about the book, my feelings, and the main idea. Some of my work could have been neater and more clear.

2 = I did ok. I did most of what was expected of me but I left some out, or didn't do them all.

1 = I didn't do what was wanted. I left out more things than I did. I needed to think and do more than I did.

SCORING

16 - 20 =	Excellent
10 - 15 =	Good
5 - 9 =	Okay
0 - 5 =	Needs Improvement

RECORD-KEEPING

Included in the record keeping may be the conference form used by the teacher during conferences. This could include specific forms to check fluency and understanding and/or running record form. Also included is an Individual Conference Log used to record anecdotal records.

PARENT INVOLVEMENT

At the beginning of the year, a letter is sent home to parents explaining the Reading Workshop and it's components according to the teacher and how they have chosen to set it up. Included in the letter would be an explanation of why responding to literature is a valid way for students to use their time. The planning and response look-fors would be shared with parents as well as the scoring rubric. Planning and Response assessment sheets would then be part of the student's portfolio to be shared with parents.

RESPONSE PLANNING SHEET

Name ______________________________

Name of book ______________________________

Date of response ______________________________

Today's date ______________________________

What I am going to do:

What I am going to say about the book - my thoughts, feelings, opinions, main idea:

Items I will need for my response:

Attachment i

Name ______________________________

MY READING LOG

Date	Author	Title	Pages

Taken From: Jackson, N. with Pillow, P. New York: Scholastic, 1992

BOOK SHARING ASSESSMENT FORM

Name ______________________ Date__________ Response Type ________________

Literature ___________________________

Planning look-fors:

1. I planned my response in advance by filling out a planning worksheet.	
2. My response planning sheet responses are complete.	
3. My responses showed the main idea of the book.	
4. I listed all the materials I would need.	
5. I chose a response idea that is creative for me. TOTAL	

Response look-fors:

1. I shared the main idea of the book so others would know what it was.	
2. I shared why I chose the book.	
3. I gave at least two examples of what I liked and did not like about the book	
4. I shared my feelings about the book.	
5. I brought all the things I needed to give my response. TOTAL	

STUDENT'S READING RECORD

Student Name

____

*Descriptors for Reading Stages
E: Emergent
T: Transition
F: Fluent

Date	Title of Book	Literary Understanding			Reading Stage *E/T/F	Book Reading Level
		Question(s) Asked	Yes	No		

INDIVIDUAL CONFERENCE LOG

Name ______________________________

Date	Title/Author	Comments

RESPONSES

Date	Book	Response

READING WORKSHOP: AN INDIVIDUALIZED READING PROGRAM

by Marie Graham

AGE LEVEL	Early Elementary
TYPE	Performance and Portfolio
FOCUS	Language Arts as creative process, critical thinking, and process skills

OUTCOME - The student will become a thoughtful reader who reads for meaningful and self-chosen purposes in the real world; who chooses to read for pleasure and information and who assimilates knowledge thoughtfully.

ASSESSMENT PURPOSE

_X_ Making instructional decisions
_X_ Monitoring student progress in the classroom
_X_ Communicating and using summative evaluation
___ Monitoring student progress externally
_X_ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

The assessment tool can be used for several purposes. First, it can be used to make instructional decisions that enable the teacher to identify strengths and weaknesses, and modify instruction. Second, it can communicate to students and parents student progress. Last, it can be used to validate student achievement. Student's reading skills are assessed in a wide variety of performance tasks under a variety of circumstances so that we can make generalizations about student performance on other similar tasks.

SETTING

This assessment tool is being used with a group of twenty-third graders in a rural school of approximately 350 students. Included in the third grade group are two gifted students, three remedial reading students, and one student who is receiving L.D. resource services.

ADMINISTRATION

For Teachers

The following is a description of the components of Reading Workshop with an explanation of the way each component is assessed. The purpose of Reading Workshop is to individualize reading. It takes up approximately one third of the total reading program. Reading Workshop lasts about 20 minutes each day except on Fridays when it is extended to approximately one hour.

SUSTAINED SILENT READING

On Monday through Thursday mornings students have Sustained Silent Reading. (SSR) Students self-select reading material prior to SSR time. They place their selection on their desks so that they will be prepared at starting time. At 9:00 students "log in" by recording, on their log sheets, the date, author, and title of the book they are reading.

Should students not have books selected, they will read stories from the basal or from a library book. Students are not permitted to leave their desks to find a book during SSR. Students are, however, permitted to make "Lit Log" entries into their journals.

A little before 9:20, when SSR time is up, students "log out" by recording the number of pages they read during silent reading.

BOOK CONFERENCE

During SSR the teacher conferences with one student at a time for the purpose of assessing student performance in three different areas - oral reading fluency, literary understanding and reading journal review. The student brings to the conference the trade book which he/she is reading and the reading journal, which includes a sample Reading Summary sheet, the Reading Log sheet, and "Lit Log" entries.

ORAL READING FLUENCY

Students select a page or two from their trade books to read orally. The teacher assesses oral reading expression, understanding of punctuation reading expression, understanding of punctuation marks, and knowledge of language structure.

LITERARY UNDERSTANDING

The teacher asks the student questions that require the application of a literary element to the student's selected book. Sample questions are listed on the "Sample Questions" sheet.

READING JOURNAL REVIEW

The teacher checks the student's reading journal for Reading Log Sheet entries, for Reading Summary sheets, and for "Lit Log" entries.

FRIDAY READING WORKSHOP PROJECT

On Fridays from 10:00 - 11:00 students have Friday Reading Workshop. Students are first required to fill out a Reading Summary sheet. On this form students record the book they have been reading during the week, to color an icon that will indicate what genre the book is, to write a summary of the book, and to rate the book. Students may then have a choice of activities in which they can participate. They may choose to have Sustained Silent Reading, or they can work on a Reading Workshop Project which may be an oral book report, an individual class presentation of a trade book, or a group skit. During each six weeks two Fridays are set aside for presentations and oral reports. Students are required to present on Reading Workshop Project to the class each six weeks. Students are assessed on the oral presentation and the written project.

Materials

trade books, folders to hold student work, recordkeeping forms

LOOK-FORS

Please see the attached recordkeeping forms for the look-fors.

RUBRIC

5 = Beyond expectation
4 = Consistently
3 = Most of the time
2 = Sometimes
1 = Not often

SCORING

Outstanding	53 - 65
Satisfactory +	40 - 52
Satisfactory	27 - 39
Satisfactory -	14 - 26
Needs Improvement	0 - 13

RECORD-KEEPING

Please see the attached form.

PARENT INVOLVEMENT

Please see the attached parent report form.

READING WORKSHOP Date ________	Sustained Silent Reading			Book Conference						Reading Journal			Workshop Project			Comments
				Oral Reading			Literary Understanding									
Student's Names	Reads silently for extended periods.	Chooses to read when given free choice.	Reads a wide variety of styles and topics.	Reads aloud with expression.	Self-corrects using knowledge of language.	Shows understanding of punctuation marks.	Recalls events and characters from text.	Retells, discusses and expresses opinions.	Knows theme of book.	Makes comments and shows feelings about the characters.	Rewrites information from text in own words.	Writing shows meaning inferred from the text.	States main idea of the story.	Tells plot of the story.	Tells own idea about a book.	

Student's Name ______________________

READING ASSESSMENT

Parent Report

The following is a checklist of the reading activities that we do in our classroom during the course of the week. As I hear the children read, observe their independent reading habits, talk to them about the books they read, check their reading log, read their journal entries, etc., I use this checklist to keep a record of the quality of performance so that I will be able to conference with them about their work. I am sending a copy to you so that you can reinforce the learning activities that we do at school. I would like to suggest that you and your child look at the list together and talk about items that deserve praise and also those that need improvement.

		Teacher Comments
Sustained Silent Reading Reads silently for extended periods. Chooses to read when given free choice. Reads wide varieties of topics.		
Oral Reading Reads aloud with expression. Shows understanding of punctuation marks. Self-corrects using knowledge of language structure.		
Literary Understanding Retells, discusses and expresses opinions on his/her book. Recalls events and characters spontaneously from text. Knows the theme of his/her book.		
Reading Journal Makes comments and expresses feelings about characters. Writing shows meaning inferred from the text. Rewrites information from text in own words. Log is complete and kept up to date.		
Book Reports - Oral and Written States main ideas of the story. Tells own idea about a book. Tells plot of the story.		

SCORING CODE

How well does the student perform this skill?

5 - Beyond expectation
4 - Consistently
3 - Most of the time
2 - Sometimes
1 - Not often

Parent Comments

Name ______________________________

READING LOG

Date	Author	Title	Pages

Circle your page number with a red crayon when you have finished reading your book.

Name ______________________________ Date ________________

READING SUMMARY

Title ____

Author ____________________________ Pages Read ______________

SUMMARY

____

____

____

____

____

____

Rate Your Book
Draw Stars to show
how well you like
your book.
One star: not very good. Two stars: pretty good.
Three stars: super.

Kind of Literature Circle one

Biography

Fiction

Mystery

Non-fiction

Name ______________________________

CONTRACT

READING WORKSHOP

I AM GOING TO READ _________________________ FOR MY READING WORKSHOP PROJECT.

I CHOSE THIS BOOK BECAUSE ______________________________
____

I WILL HAVE THE BOOK READ BY ______________________

MY RESPONSE PROJECT FOR THE BOOK WILL BE __________
____

I WILL HAVE IT READY TO PRESENT BY ________________

SAMPLE QUESTIONS FOR STUDENT-TEACHER BOOK CONFERENCE

What is the title of your book?

Who is the author?

What can you tell about the author by reading this book?

Who are the main characters in your book?

Choose one character. Why is this character important in the story?

Is there a character that you like more than the others? Why?

Is there a character that you dislike more than the others? Why?

What is your book about?

Tell the main things that happened in the book.

Where does your story take place?

What was the place like?

Did it happen long ago or could it have happened now?

Was there a funny part?

Was there a sad part?

What was your favorite part?

Do you think there is a message in the story?

Would you recommend this book to a friend? Why?

SAMPLE "LIT LOG" PROMPTS

The part of the book that I liked best was ....

I liked that part because..........................

The part of the book that I did not like was..............

I did not like that part because............................

The character in this book reminds me of somebody I know because................

The character reminds me of myself because....................................

If I were (name of character) I would have................................

The situation reminds me of a similar situation in my own life. It happened when........

This story reminds me of another story I read. It was about....................

I would like to read another book like this one because..........................

I really don't understand this part because........................

WRITING ASSESSMENT

by Jane Daniel, Linda Hutson, and Carole Lear

AGE LEVEL K - 12
TYPE Holistic Checklist
FOCUS English Language Arts as Writing Process. Holistic evaluation of the writing process and observation of writing samples using five domains: *Composing, (organization) style, sentence, formation, usage, and mechanics,* correlates with January 1994 Draft of English/Language Arts Curriculum Guide County of Albemarle, Virginia. (Writing and Grammar Usage, Mechanics) and the Virginia Literacy Passport Test for Writing.

ASSESSMENT PURPOSE

X Making instructional decisions

A teacher uses the data form this assessment to make instructional decisions for individual learners and groups (mini-lessons) by reviewing the processes and products of the assessment in an ongoing basis. (alone and with the writer)

X Monitoring student progress in the classroom

A teacher uses the data from this assessment to monitor student progress by reviewing the process and products of the assessment on a regular basis alone, with the writer and the writer's parents.

X Communicating and using summative evaluation

In this type of scoring, the observation of writing is divided into five domains (categories), each of which is comprised of various features. Each domain is evaluated holistically, with the domain score indicating the extent to which the features appear to be under the control of the whole domain and is not a counting of demonstrated features.

X Monitoring student progress externally

In this type of scoring, the observation of writing is divided into five domains (categories), each of which is comprised of various features. Each domain is evaluated holistically, with the domain score indicating the extent to which the features appear to be under the control of the whole domain and is not a counting of demonstrated features.

X Validating student achievement

In this type of scoring, the observation of writing is divided into five domains (categories), each of which is comprised of various features. Each domain is evaluated holistically, with the domain score indicating the extent to which the features appear to be under the control of the whole domain and is not a counting of demonstrated features.

X Evaluating programs

Educators and administrators could collect data from various classrooms to assess the strengths and weaknesses of the writing process. Data, kept in folders or portfolios could be used to evaluated programs.

X Addressing Accountability

In this type of scoring, the observation of writing is divided into five domains (categories), each of which is comprised of various features. Each domain is evaluated holistically, with the domain score indicating the extent to which the features appear to be under the control of the whole domain and is not a counting of demonstrated features.

SETTING

This assessment could be used in classrooms heterogeneously or homogeneously grouped on any grade level.

This assessment was initially used in K-1, 2 and 4 classrooms at Woodbrook School. Woodbrook School in Albemarle County, Charlottesville, Virginia is a small community school with an enrollment of 200 children in kindergarten- fifth grades. The school is nestled in the middle of the subdivision. Woodbrook has three K -1 classes, two second, two third, one fourth, one fifth, and one fourth/fifth grade combination classes. Our school does not qualify for Chapter I. Parents are actively involved in our school through the P.T.O. and volunteer programs.

ADMINISTRATION

For Teachers

Each student has a conference with her/his teacher to select which paper from the student's portfolio to submit for assessment purposes. All of the papers were developed by the students in various stages of the writing process.

- Students may use this selected paper to create as many or as few rough drafts as they see necessary to complete their final writing sample for assessment.
- Novice and beginning writers may choose to create a single draft to submit for their writing sample.

The holistic writing scale is completed by the teacher and then attached to the writing sample. The teacher and student discuss the writing assessment in depth. The teacher and student then set goals (one or two) for future writing based on the five domains. The teacher assessment and the student goals could be shared with parents.

Writing samples should be administered two-three times yearly. Some teachers may choose to highlight with different colors for each observation. In this way growth (or stability) may be shown over time. Although highlights do not stack up consistently under one stage, an 0 - 5 score or writing stage may be determined by averaging the features for each observation.

Throughout the year writing should be analyzed around one or two specific features in a domain based on instructional needs of the student. (For example: A teacher could plan a mini-lesson emphasizing the use of descriptive language (Style domain) Patricia Polacco's books such as Chicken Sunday provide excellent examples in developing the concept of figurative language: "...flat as a hen's tongue...," "...a voice that sounds like slow thunder and sweet rain." In these instances, writing would be observed around one feature. Students are given time and various opportunities to practice the feature usage in journals and writing.

GLOSSARY

Conventions:
Generally accepted practices (i.e. a. an. them. those: My friend and I)

Elaboration:
Expressing ideas in greater length or detail: through development

Enjambment:
The running over of a sentence into another related sentence (run-ons)

Format:
A plan for the organization and arrangement of something. (i.e. poems, letters, plays, etc.)

Insight:
The capacity to understand the nature of a situation: discernment, intuitiveness.

Standard Agreement:
Correspondence of related parts of sentences in gender, number, and case (i.e. subject-verb agreement, agreement of pronouns with their antecedents)

Standard Inflections:
Alteration of the form of a verb, noun, pronoun, or adjective to indicate different grammatical and syntactical relations (i.e. tenses, possessives, plurals)

Temporary Spelling:
Phonetic spelling by beginning spellers: replaced incrementally by correct spellings as children master spelling patters (also termed inventive spelling)

Tone:
General quality of atmosphere or mood conveyed by a composition

Transition:
The achievement of unity in a composition by reference to ideas that precede or follow.
Transitional devices include use of words such as first, after, meanwhile, because, besides, but, however, and although; repetition of repeating a word used earlier; use of synonyms or pronoun reference.

Voice:
The writer's personality that comes through in composition

Writing Sample:
A piece of writing that has been drafted, revised, and edited to the best of the writer's ability

DOMAINS AND HOLISTIC SCORING SCALE FOR WRITING SAMPLES

(From the Literacy Passport)

Composing - The writer focused on structuring and elaborating to construct an effective message for the reader. The paper is crafted to present a message that is well organized. Features include:

Central idea
Elaboration
Unity
Organization

Style - The writer purposefully shaped and controlled language, focusing on rhythm, vividness, and specificity. Features include:

Selected vocabulary
Sentence variety
Tone
Voice

Sentence Formation - This domain reflects the writer's ability to form competent sentences to form his/her thoughts. Features include:

Completeness
Standard word order
Expansion and embedding with modifiers

Usage - The writer's word level features written language that is appropriate and acceptable for standard discourse. Features include:

Standard agreement
Word meaning
Conventions
Standard inflections

Mechanics - The writer includes the standard system of symbols and cuing devices to help readers make meaning. Features include:

Capitalization
Punctuation
Formatting
Spelling

Materials

Teacher use folders, three ring binders, notebooks, post it notes, file cards, etc. to record data such as conference notes, writing in progress, student and teacher goals and plans for mini-lessons.

*A writing folder or portfolio for each student

*Holistic evaluation scoring scale

*various writing materials (markers, pencils, pens, liquid paper, correction tape, various kinds of paper, blank books, staplers, highlighters, writing notebooks, paste, glue, scissors, rubber stamps, date stamps, ink pads, self stick or gummed reinforcements, paper clips,brads.)

*dictionaries, thesauruses, a sufficient variety of classroom books, writing samples from a variety of students

LOOK-FORS

See Albemarle Holistic Scoring Scale for descriptors and rubric. (Also included on pgs 3:70-3:71 is Virginia's Literacy Passport Test for Writing: What's Scored and Why. This shows a relationship between this framework and the LPT).

SCORING

Refer to Administration.

RECORD-KEEPING

Writing samples are kept in folders or portfolios in each classroom. This data moves with the student each year. *The Albemarle County Holistic Evaluation Scoring Scale* is attached to the writing sample. Each assessment is dated and highlighted differently. Separate scoring sheets may be attached to each sample assessed or the same sheet may be used for all samples assessed in a given year, highlighting differently for each observation.

PARENT INVOLVEMENT

1. Data from this assessment are shared with parents and writer through conferences on a regular basis.
2. Goal setting includes all the "shareholders;" parent, writer and teacher. These goals are dynamic, changing as they are met and based on writer's individual needs.

Name: ______________________________

ALBEMARLE COUNTY HOLISTIC SCORING SCALE

	Score 0 Emergent Writer	Score 1 Novice Writer	Score 2 Beginning Writer	Score 3 Intermediate Writer	Score 4 Competent Writer	Score 5 Advanced "Expert" Writer
Composing (Organization)	• May choose to scribble, draw, imitate classroom print, or produce random letters • Most meaning conveyed through picture, writing may or may not be intended to carry meaning • Needs a great deal of support with writing expectations	• Main idea is not evident • Introduction, body, and conclusion are not evident or unclear • Basic listing of ideas	• Main idea is understandable but with many irrelevant or poorly developed details • Introduction, body, and conclusion are weak • Basic listing with some descriptive detail rarely used paragraph form	• Main idea is clear but with some irrelevant or poorly developed details • Good introduction, body, and conclusion but part may contain ideas not fully developed (Indicate part __introduction __ body ___conclusion) • Good expansion of specific details with some paragraphing	• Main idea is clear with relevant details • Introduction catches interest • Body contains clear, sufficiently developed ideas • Conclusion sums up • Well developed details with some multi paragraphing	• Main idea is clearly evident and tied together with relevant details • Introduction catches interest • Body contains clear, fully developed ideas • Conclusion sums up • Multi paragraphs • Clearly written with well developed elaboration
Style	• If present, result of oral interpretation of composition (i.e. drawing, scribble, imitation of classroom print or random letters) • Purpose for writing is personal (no sense of audience)	• Personal audience (write for themselves) • Some descriptive language if modeled • General words and organization are overused (I like __ I like ___ I like ____)	• Occasional awareness of audience • Some descriptive language present • Sentences show little variety in length and organization	• Limited voice and awareness of audience • Limited insight • Some innovative techniques such as figurative speech, dialogue, humor, genre present • Sentences show some variety in length and organization	• Student experiment with different types of writing (purpose) • Innovative techniques such as figurative speech, dialogue, humor, and genre used adequately • Sentences vary in length and organization	• Appropriate to the intended audience and purpose, including unusual expression, word combinations • Mature insight • Innovative techniques such as figurative speech, dialogue, humor, and genre used with flair • Sentences vary in length and organization
Sentence Formation	• No concept of sentence • Model through oral communication	• Sentence meaning is unclear • Majority of sentences are incomplete (labeling) • No transitions • Ideas are often expressed as a basic listing of ideas	• Ideas are sometimes hard to follow • Simple patterns • Occasional use of transition • Uses some simple choppy sentences • Subject verb agreement errors	• Ideas are accurate but not always fluent • Most sentences are complete • Frequent use of transitions • Use some variety in sentences expanded with phrases telling when, where, how and why • Frequent use of run on sentences	• Ideas are stated accurately and fluently • Uses complete sentences • Consistent use of transition • Occasional run on sentences • [illegible] consistency and subject verb agreement	• Ideas are articulated accurately and fluently • Sentence structure demonstrates syntactic and verbal sophistication • Fluent use of transition • Non enjambment
Usage	• Not evident • Model through oral communication	• Need much support in standard written usage	• Confusion in standard inflection word meaning and conventions	• Some errors in standard agreement, inflections, word meaning and conventions	• Appropriate and acceptable written usage	• Standard English usage
Mechanics	• Beginning to form letters and words	• Majority of basic words are misspelled (temporary, phonetic) • Punctuation is inaccurate or omitted • Capital letters are used indiscriminately • Formatting is not observed (listing)	• Some basic words are misspelled • Many punctuation errors are found • Many capitalization errors are found • Formatting is not observed	• Basic words are spelled correctly • Few punctuation errors are made • Few capitalization errors are found • Some use of formatting	• Writing improves in mechanical correctness • Few if any spelling, capitalization, and formatting errors	• Clear, mechanically correct work

Adapted by Jane Daniel, Linda Hutson, Carole Lear, teachers - Woodbrook Elementary School

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Writing and Grammar, Usage, and Mechanics

The writing strand of the curriculum has as its purpose the development of students who like to write and who write effectively for personal and functional purposes. The following diagram, illustrates the types, purposes, and forms of writing that make up a comprehensive writing program. Students at all grade levels should do writing of each of the three basic types: expressive (writing to express oneself), poetic (writing to create), and transactional (writing to communicate with others).

Types of Writing:	Expressive	Poetic	Transactional
Audience:	Self	Interested reader	Receptive reader who needs to understand content
Purpose:	Reveal nature	Create work of art	Explain, Inform and Persuade
Forms:	Private Writing	Public Writing	Public Writing
	Freewriting Illustrations Monologues Dialogues Notes to self Notetaking Lists Journals, Diaries	Screenplay Stories Poetry Fiction -short stories -novelettes -novels	Exposition Description Argumentation Narration Logs Dialogue Journals Memo writing Letters: Friendly/Business Research Interview Speechwriting Advertisment Technical Writing Summary

Ref: James Britton
Language and Learning
England: Penguin Books, 1970

Children differ markedly in the time that they take to develop writing abilities, writing stages are indicated. The stages are adapted from holistic writing assessment tools developed by Albemarle teachers several years ago.

Though grammar, usage, and mechanics are a part of reading and oral language as well as writing, most concentrated teaching of these concepts occurs in conjunction with the teaching of writing. Therefore the content and goals of grammar, usage, and mechanics are listed here.

At all stages, the following content should be emphasized:

Types of writing--expressive, poetic, and transactional
- * writing for personal purposes
- * writing to create
- * writing to communicate with others

Processes of writing--
- * generating ideas through various strategies
- * using computer or word processor for composing
- * sharing of writing with adults and peers
- * responding orally to shared writing
- * publishing (definition of publishing varies depending on purpose and level)

Content is further categorized by the domains of holistic scales for evaluating writing: Composing/organization, Style, Sentence Formation, Grammar & Usage, and Mechanics. The "Albemarle County Holistic Scoring Scale," developed by Jane Daniel and Carole Lear as part of their work on the Blue Ridge Assessment Project, is in this document.

Kindergarten: Preliterate Stage of Writing

Characteristics of students at this stage:

Preliterate writers are learning to form letters and words. They may choose to scribble, draw, imitate classroom print, or produce random letters. Their experience as writers has been limited. Their writing may or may not be intended to carry meaning. These students need a great deal of support with writing expectations of the classroom.

Content:

Types of writing--
- * explaining scribbles, drawings, etc.
- * labelling objects

Processes--
- * generating ideas for writing

Mechanics--
- * forming letters of the alphabet

Goals:
- + Students understand the purposes of writing.
- + Students develop an appreciation for their own and others' writing.
- + Students progress in their ability to form letters and work.

First Grade: Novice Stage of Writing

Characteristics of students at this stage:

Novice writers have learned to express themselves with letters representing sounds to the extent that what they write can increasingly be read by themselves and by others. They may write just a word, a phrase, or a short sentence or two. They write primarily for themselves, though they may want to share their writing with others. They assume much knowledge on the part of their reader. Their writing is often a retelling of experiences, which may be expressed as a basic listing of details. They may imitate classmates' ideas; rarely, if ever, generating ideas for themselves. Novice writers often focus on completing a task rather than writing to convey a message.

Content:
Types of writing--
* writing lists, freewriting, pattern poems and stories, messages, letters

Processes--
* focusing on purpose for writing
* using drawing to focus thinking
* rereading what has been written
* publishing writing by posting on classroom wall or in class books (unedited)

Mechanics--
* forming letters of the alphabet
* differentiating between words with spaces

Goals:
+ Students write fluently for personal purposes.
+ Students are able to reread what they have written.
+ Students increase their ability to write to communicate.

Second and Third Grades: Beginning Stage of Writing

Beginning writers are beginning to feel comfortable with writing, discovering experiences about which to write, and developing a repertoire of writing strategies. They show an increased awareness of different types of writing. They show less focus on task completion and more focus on communicating a message. Their writing carries meaning.

Content:
Types of writing--
* examining models of different types of writing
* writing notes, journals, pattern stories, fantastic stories, personal narratives, poetry, letters, reports
* introducing writing for specific audiences: teacher, peers, parents, public

Processes--
* prewriting strategies (examples: brainstorming, drawing, discussing, collaboration)
* revising: considering ideas suggested by others, making minor additions and deletions, reorganizing information with adult help
* editing with support for capitalization, punctuation, and spelling concepts that have been taught (see list below under "mechanics" and see spelling curriculum)

Composition/Organization--
* focusing on a central idea
* introducing organization of writing: introduction, body, conclusion

Sentence Formation--
* writing in complete sentences

Usage--
* using capitalization: first word of sentences, names of people and pets, and the pronoun I
* using terminal punctuation: periods

Goals
+ Students' writing features understandable central idea.
+ Students begin to organize their personal narratives and stories with conventional organizational patterns (chronological order; beginning, middle, end).
+ Students usually use complete sentences.
+ Students usually capitalize the first word of sentences and names.
+ Students use periods at the end of sentences.
+ Students use writing to express themselves and to learn.
+ Students write fluently.

Fourth and Fifth Grades: Intermediate Stage of Writing

Reaching the intermediate stage of writing marks an important step toward reaching competency as a writer. Intermediate writers are able to focus on writing for an audience other than themselves, and to manipulate information to affect a reader. They are gradually becoming more adept at organizing their thoughts and selecting information to make their writing communicate better and interest readers. There is a heavy emphasis on composing, style, and mechanics at this stage.

Content:

Types of writing--

- examining models of different types of writing
- writing notes, journals, personal narratives, poetry, stories, letters, memos, reports, answering questions, giving directions
- emphasizing writing for specific audiences: teacher, peers, parents, public

Processes--

- practicing a variety of prewriting strategies
- drafting using a computer or word processor
- sharing writing with adults and peers
- revising to make writing more understandable
- editing for usage and mechanics concepts that have been taught

Composition/Organization--

- organizing paragraphs: topic sentence, supporting sentences, conclusion
- format of personal letters: date, salutation, body, closing, signature

Style--

- using dialogue
- using interesting, less general vocabulary to increase reader interest

Sentence Formation--

- writing in complete sentences
- combining sentences

Grammar & Usage--

- introducing parts of speech: nouns, verbs, pronouns, adjectives, adverbs, prepositions
- emphasizing agreement of subjects and verbs

Mechanics--

- using capitalization conventions: names of days of week, names of months, names of holidays, names of places, initials, names of books

Goals:

+ Students use writing to express themselves and to learn
+ Students' transactional writing exhibits clear central idea.
+ Students support the central idea with some relevant details.
+ Student writing shows evidence of knowledge of organization patterns (introduction, body, conclusion).
+ Students use some descriptive words and figurative language.
+ Students write sentences that make sense.
+ Students use some variety in sentences.
+ Students begin to use paragraphs.
+ Students increase the mechanical correctness of their writing (see content list)
+ Students write fluently.

Sixth, Seventh, and Eighth Grades: Competent Stage of Writing

Competent writers communicate effectively with others in many types of writing. Their ideas are well expressed, organized, and mechanically correct so as not to interfere with the reader's comprehension. From this point, the focus of instruction in writing is to help them gain sophistication in expressing more complex ideas.

Grade 6 Content:

Types of writing--

- examining models of different types of writing
- emphasizing exposition and narration
- writing short stories, brochures, memos, "how to's", advertisements, research reports
- reinforcing writing for specific audiences: teacher, peers, parents, public

Processes--

- practicing a variety of prewriting strategies
- drafting using a computer or word processor
- sharing writing with adults and peers
- editing for usage and mechanics concepts that have been taught

Composition/Organization--

- organizing paragraphs: topic sentence, supporting sentences, conclusion
- emphasizing organizational patterns in expository writing: spatial order, order of importance of ideas, logical order
- prioritizing information
- format of personal letters: date, salutation, body, closing, signature

Style--

- using dialogue
- using interesting, less general vocabulary to increase reader interest
- showing, not telling

Sentence Formation--

- writing in complete sentences; recognizing fragments and run-on sentences
- combining sentences
- recognizing and using four kinds of sentences: declarative, imperative, interrogative, and exclamatory

Grammar & Usage--
- * introducing conjunctions, interjections
- * emphasizing nouns (common and proper; singular and plural), verbs (present, past, and future tenses; irregular; verb "to be"), pronouns, adjectives, adverbs, and prepositions
- * reinforcing agreement of subjects and predicates; compound subjects and predicates

Mechanics--
- * reinforcing use of capitalization conventions: titles, family relationships, deity; proper nouns, including names of cities, states, places, organizations, holidays; first word of quotation, salutations and closings of letters
- * reinforcing use of punctuation:
  - - question marks
  - - exclamation marks
  - - commas in series, in dates, between city and state, after noun of address, in introductory phrases and clauses, in apposition, in salutation and closing of letters
  - - quotation marks in dialogue; in names of articles, poems, songs
  - - underlining names of books, magazines
  - - colon
  - - apostrophe in possessives, contractions

Grade 7 Content:

Types of writing--
- * examining models of different types of writing
- * emphasizing exposition and narration
- * writing journals, notes, personal evaluations, myths, short stories, news reports, research papers
- * reinforcing writing for specific audiences: teacher, peers, parents, public

Processes--
- * practicing a variety of prewriting strategies
- * drafting using a computer or word processor
- * sharing writing with adults and peers
- * revising to make writing more understandable
- * evaluating writing qualities in model composition, and in their own and classmates' compositions
- * editing for usage and mechanics concepts that have been taught

Composition/Organization--
- * developing main ideas with pertinent details and examples
- * perfecting paragraph development and structure
- * emphasizing organizational patterns in expository writing: spatial order, order of importance of ideas, logical order
- * prioritizing information

Style--
- * using figurative speech, dialogue, dialect, humor
- * using interesting vocabulary and unusual expression to increase reader interest

Sentence Formation--
- * writing in complete sentences; recognizing fragments and run-on sentences
- * varying sentence types

Grammar & Usage
- * reviewing uses of the eight parts of speech
- * emphasizing verbs (appropriate use of tenses; principal parts of irregular verbs, linking verbs, verb phrases), pronouns (case forms, agreement with antecedent), adjectives (comparative and superlative forms)
- * introducing complements: direct and indirect objects, predicate nominatives and predicate adjectives
- * avoiding double negatives
- * avoiding redundancy

Mechanics--
- * reinforcing use of capitalization conventions: titles, family relationships, deity; proper nouns, including names of cities, states, places, organizations, holidays; first word of quotation, salutations and closings of letters
- * reinforcing use of punctuation:
  - - terminal punctuation
  - - commas with quotations, with conjunctions, in non-restrictive phrases and clauses, in series, in dates, between city and state, after noun of address, in introductory phrases and clauses, in apposition, in salutation and closing of letters
  - - quotation marks in dialogue; in names of articles, poems, songs; single quotations
  - - underlining names of books, magazines
  - - colon in business letters, with letters of the alphabet
  - - semi-colons
  - - hyphens
  - - apostrophe in possessives, contractions (not in plurals)

Grade 8 Content:

Types of writing--
- * examining models of different types of writing
- * reviewing paragraph development and structure

* writing journals, notes, personal evaluations, short stories, news reports, research papers, surveys, recommendations, persuasive essays, business letters, speeches
* reinforcing writing for specific audiences: teacher, peers, parents, public

Processes--
* practicing a variety of prewriting strategies
* drafting using a computer or word processor
* sharing writing with adults and peers
* revising to make writing more understandable
* editing to correct mechanical and syntactical errors

Composition/Organization--
* perfecting paragraph development and structure
* reinforcing organizational patterns in expository writing: spatial order, order of importance of ideas, logical order

Style--
* using figurative speech, dialogue, dialect, humor
* using interesting vocabulary and unusual expression to increase reader interest

Sentence Formation--
* writing in complete sentences; recognizing fragments and run-on sentences
* varying sentence types

Grammar & Usage--
* reviewing uses of the eight parts of speech
* emphasizing consistency of verb tenses; case forms of pronouns in compound sentence; agreement of pronouns with antecedents
* emphasizing usage of complements: direct and indirect objects; predicate nominatives and predicate adjectives

Mechanics--
* editing for correct mechanics in written composition

Goals:
+ Students use writing to express themselves and to learn.
+ Students write fluently.
+ Students experiment with different types of writing.
+ Students are able to write a well-organized paragraph in which they make a point and support it.
+ Students write with clear voice and awareness of audience.
+ Students manipulate vocabulary and information to affect the reader.
+ Students state ideas accurately and fluently.
+ Students' writing exhibits use of transitions.
+ Students use the revising and editing processes to improve their writing.
+ Student writing improves in mechanical correctness (see content list above.)

Extension Strand: Advanced Stage of Writing

Advanced writers have mastered basic written form. They consistently write interesting and effective pieces, with a clear organization and sufficient supporting detail. They adapt their writing style to various audiences, use a variety of sentence types, and exhibit few grammatical, usage, or mechanical errors. The content of the writing for these writers focuses on more advanced topics.

Content:

Types of writing--
* expressive writing--writing to think, writing to learn
* poetic writing--creative writing
* transactional writing--essays, persuasive essays, speeches, literary analysis, research papers

Processes--
* studying examples of quality writing
* becoming more proficient with the revising and editing processes

Composing/Organization--
* avoiding errors in reasoning

Style--
* studying author's effect and how it is achieved

Grammar & Usage--
* coordinating and subordinating phrases and clauses
* placing modifiers appropriately
* using parallel structure

Goals:
+ Students use expressive, poetic, and transactional writing to fulfill their own purposes.
+ Students write multi-paragraph papers with clear ideas and well-developed elaboration.
+ Students write in personal, distinctive style that is appropriate to the intended audience.
+ Students use innovative techniques such as figurative speech, dialogue, humor.
+ Students can distance themselves from their own writing and reflect on a piece objectively.

+ Students adapt the writing process to suit their style needs.
+ Students use revision and editing to produce clear, mechanically correct work.

Handwriting

K-1 Goals:
+ Students develop and use motor skills essential for manipulating writing tools
+ Students form legible manuscript letters and numerals from memory.

2-3 Goals:
+ Students write legibly in manuscript and in cursive.
+ Students begin to use the keyboard of a computer or word processor.

4-8 Goals:
+ Students refine their skills with manuscript and cursive writing.
+ Students write neatly and legibly in manuscript and cursive.
+ Students become adept with keyboarding and use of the computer or word processor for composing.

THE LITERACY PASSPORT TEST FOR WRITING WHAT'S SCORED: HOW AND WHY

WRITING ASSIGNMENT

Write about your best friend moving away. Use your planning time to think about what you will write. Imagine that your best friend has told you that he or she will be moving to another school in just two weeks. Think about how you will feel after your friend has gone. Think about how you became best friends, and what you will miss most about your friend. Think about ways to tell about how you feel about your best friend moving away. Use the scratch paper your teacher gave you to make notes or to list ideas.

When you finish planning, begin writing your paper on page 1 of the Writing Page. Write about your best friend moving away. The people who will read your paper are adults, like you teacher. Be sure to write so that these people will know how you feel about your best friend moving away.

When you finish writing, read your paper to be sure it makes sense. Be sure that you have used the best words to say what you want to say. Make all of the changes that you think will help your paper, and correct all the mistakes that you can find. Make your changes and corrections neatly so that your paper will be easy to read.

CHECKLIST FOR WRITERS

__ I planned my paper before writing it.
__ I revised my paper to be sure that
  __ the subject of my paper was clear;
  __ everything in my paper told about my subject;
  __ my paper was logically organized so readers would understand my message;
  __ my words and information made my paper interesting to readers; and
  __ my sentences made sense, sounded like me, and read smoothly

__ I edited my paper to be sure that
  __ I used good grammar;
  __ I used capital letters and punctuation marks correctly;
  __ I let my readers know where I started new paragraphs; and
  __ I made my spelling correct.
__ I proofread my paper to make sure that my paper was the way I wanted readers to read it.

DOMAIN SCORING

In this type of scoring, the observation of writing is divided into five domains (categories), each of which is comprised of various features. Each domain is evaluated holistically, with the domain score indicating the extent to which the features appear to be under the control of the writer. Thus, the score is a judgement of control of the whole domain and is not a counting of demonstrated features. While some skilled scorers can score for all domains after one complete reading, most scorers will re-read the whole or portions in order to make score decisions about domains.

All papers are read by at least two readers, with the final score being the total given in both readings. When the two readers' domain scores are non-adjacent, the paper will be read by a third reader. The final score in the disputed domain is the sum of the third reader's score plus the previous identical or higher score. Composing and Style domain scores are weighted in final tabulations to reflect their fundamental developmental importance.

Final total scaled scores and raw scores for each of the five domains are reported. A scale score of 250 is passing; this represents a total raw score of from 43-47, depending on a particular year's prompt. The complete total determines pass/fail or competent/needs remediation. However, the five domain scores, along with an awareness of the features comprising each domain, are useful in planning developmental or remedial instruction for each student.

Scoring Scale

Each domain is scored independently, using the following scale. (Domain weighting is accomplished by computer programming after optical scanning of readers' scores.)

4- The writer demonstrates consistent, though not necessarily perfect, control* of almost all the domain's features.

3- The writer demonstrates reasonable control* of most of the domain's features, but enough inconsistent control exists to indicate some real weakness in the domain.

2- Enough inconsistent control* of several features exists to indicate significant weakness in the domain or writer controls some features but does not control other features of the domain.

1- The writer demonstrates little or no control* of most of the domain's features.

* Control: The ability to use a given feature of written language effectively at appropriate grade level.

DOMAINS AND DEFINITIONS

COMPOSING: (C)

The Composing Domain includes the focusing, structuring, and elaborating that a writer does to construct and effective message for a reader. It is the creation of a product, the building of a writing intended to be read. The writer crafts his/her message for the reader by focusing on a central idea, providing elaboration of the central idea, and delivering the central idea and its elaboration in an organized text. Features are:

- Central idea
- Elaboration
- Unity
- Organization

STYLE: (S)

The Style Domain comprises those features that show the writer purposefully shaping and controlling language to affect readers. This domain focuses on the vividness, specificity and rhythm of the piece and the writer's attitude and presence. Features are:

- Selected vocabulary
- Selected information
- Sentence variety
- Tone
- Voice

SENTENCE FORMATION: (F)

The Sentence Formation Domain reflects the writers's ability to form competent, appropriately mature sentences to express his/her thoughts. Features are:

- Completeness
- Non-enjambment
- Expansion through standard coordination and modifiers
- Embedding through standard subordination and modifiers
- Standard word order

USAGE (U)

The Usage Domain comprises the writer's use of word level features that cause written language to be acceptable and effective for standard discourse. Features are:

- Standard inflections
- Agreement
- Word meaning
- Conventions

MECHANICS (M)

The Mechanics Domain includes the system of symbols and cuing devices a writer uses to help readers make meaning. Features are:

- Capitalization
- Punctuation
- Formatting
- Spelling

APPLICATION OF SCALE

1) Look as much at what the writer does well as at what he/she does poorly.
2) Give consideration to all features within domain.
3) Do not contaminate the scoring of one domain by awareness of either accomplishments or errors belonging to another domain.
4) Do not create double jeopardy, e.g., an enjambment in Sentence Formation is not also a punctuation error in Mechanics, and "brite" is one misspelling no matter how often the word appears.

5) Compare papers to the requirements of each domain, not to each other, or to student writing that you may have previously read, or to some general standard of desired literacy.
6) It is impossible to evaluate what the writer might have intended to say.
7) A word that seems to have been omitted due to haste in revising, editing, or copying need not demonstrate a total lack of control over that feature.
8) Length, in and of itself, is not a feature of any domain.
9) Read the entire paper before assigning any scores.

NON-SCOREABLE PAPERS

All papers, no matter how brief, must be scored, unless they are off-topic, illegible, incoherent, refusals to respond, or written in a language other than English. Only the Scoring Director is permitted to assign a non-scoreable code.

A completely blank paper should be scored "NT" (not taken).

ALERT PAPERS

Because the prompts are designed to have meaning to students so that they can create a personal response, sometimes the essay relates situations and information that are disturbing. It is Virginia's policy to bring disturbing essays to the attention of an adult close to the student as soon as possible so that positive action can be taken if necessary. Please indicate to the Scoring Director any essay which you find disturbing. Having taken care of the situation to the extent that you can, to on to score the essay according to the criteria.

DOMAIN SCORING EXPLICATIONS

Each sixth grade paper is scored by at least two readers, who independently award 4,3,2, or 1 point for the writer's control of each domain. Virginia defines control as the writer's ability to use a given feature of written language effectively for a given developmental or grade level. A paper receives a higher domain score to the extent that it demonstrates developmentally appropriate control of the features in each domain, as matched to a set of papers called the "anchor set" (see the complete anchor set in the last portion of this section). The anchor set contains three paper per scorepoint of the rubric (4, 3, 2, and 1) for each of the five domains of writing scored. For example, the anchor set contains a paper that represents a high 4 for the Composing domain, a paper that represents a mid-4 for the Composing domain, and one that represents a low-4, high-3, mid-3, low-3, high-2, etc., for Composing and every other domain scored. These papers give scorers concrete examples of the Virginia Standards for the rubric scorepoints of each domain.

Scorers award a 4 if the writer demonstrates consistent, though not necessarily perfect, control of almost all a domain's identified features; a 3 if the writer demonstrates reasonable, but not consistent, control of most of a domain's features, and indication of slight weakness in the domain; a 2 if the writer demonstrates enough inconsistent control of several features to indicate significant weakness in a domain; and a 1 if the writer demonstrates little or no control of most of a domain's features.

Scores for the Composing domain are weighted thrice and for the Style domain are weighted twice; these domains of deep structure comprise important composition features that the curriculum for elementary students seeks to develop. All other domains are unweighted. This weighting and the subsequent totalling of the two readers' scores result in raw scores that range from 16 to 64. A passing score for the writing literacy passport is 43-47, depending on the prompt used in a particular year; prompt scores are equated and presented on a standard number line, wherein 250 is passing.

Stumbling Blocks Turned Into Stair Steps

The first time I realized how sensitive I am was when I was in the fifth grade. My teacher Mrs. Daniels was the advanced English teacher. I was so proud that I had passed the test to get into her class because for many years I had been in all the lower classes because of my learning disability. Now I had my chance to shine. I wanted so much to show Mrs. Daniels, my parents, and even myself that I could handle the class and its responsibilities. But for the first time I had homework, and I had to keep an assignment notebook. Mrs. Daniels was very witty and had a wonderful smile that was as bright as sunshine. I wanted to please Mrs. Daniels because she was wonderful. It was not important to her that we were A+ students but instead she really wanted us to learn something and apply it. She really loved us *kids, and I loved her, too. Everything was great in her class until one day a week into the new school year.*

That day the first homework assignment was due. I had spent a large amount of time working on every detail of it to be sure it was correct. I had asked my mother to check it to be positive that I had done the assignment one hundred percent correct. It was really important to me that my debut to this class was the best it could be so no one, including myself, would have any doubts that I should be in there. As I was pondering her reaction to my homework, the bell rang. All of us kids were chatting with our neighbor while Mrs. Daniels was at her desk writing something. She got up from her seat and took her stage in the front of the classroom.

"Attention please. I would like to begin class now. Please open up you notebooks and find you homework. I am going to check it. Please come up when I call your name," Mrs. Daniels announced. I was so excited. I thought she would be so proud of me for doing my homework. I had worked so hard on it. I sat contentedly in my desk and doodled on a piece of paper. I was so happy that if you had opened my chest my heart would have leaped right out.

"Jessica, you're next," Mrs. Daniels said. I got up from my desk and trembled as I approached her desk. But her warm smile greeted me, and I began to take large strides to her desk as if I were accepting a the Nobel prize. I triumphantly handed her the paper and waited for her approving words. But no words came, and I stood there looking hopefully at her frowning face.

"Jessica, this is the wrong homework. You did the wrong page. I'm sorry but you're going to have to do this over," she told me with sympathy. My throat tightened, and my eyes started to swell. The flood of tears poured down my cheeks as I stood there peering at my teacher in disbelief that I had to do it over. How could she do this to me? I had worked so hard on this, and she was making me do this again. I felt like a failure. Now nobody would think I belonged in this class. I looked up into the compassionate face of my teacher as her chin began to quiver.

"Jessica," choked over her sobs, "please go to the bathroom and get cleaned up. Don't cry, you're making me cry."

I went to the bathroom that day feeling embarrassed and very confused. Nobody else cried when they did the wrong homework. Why did things like this get me so upset? My mom told me that it was because I was sensitive.

My mother would say, "Jessica, being sensitive is not a bad thing. It just means you get your feelings hurt easily. It also means that you can understand others when they are upset. Use it to your advantage." So I did just that. I learned to work hard even when I made mistakes. I have benefited from my mothers's words because I have successfully moved up into all the high academic classes including three Advanced Placement classes. Also, my sensitivity has turned to be more than just positive but rewarding. I am a Peer Counselor at my school and I help others with their problems all the times. I completely understand how they feel because I feel it too. This stumbling block in my life has actually turned into a stair step to many wonderful things.

What's the Difference Between *Authentic* and *Performance* Assessment?

CAROL A. MEYER

Performance assessment and authentic assessment are often used interchangeably, but do they mean the same thing? Although both labels might appropriately apply to some types of assessment, they are not synonymous. We must be clear about the differences if we are to support each other in developing improved assessments.

Two Examples

To distinguish between the two terms, let's look at a familiar form of assessment with which we have a wealth of experience. Following are two examples of a direct writing assessment in which students produce writing samples.

Case 1: Every May school district X conducts a direct writing assessment. For four days, all students at selected grade levels participate in a standardized series of activities to produce their writing samples. Using a carefully scripted manual, teachers guide students through the assessment with limited teacher directions and extended student writing time (up to 45 minutes) each day: Topic Introduction and Pre-writing (Day 1), Rough Drafting (Day 2), Revising and Editing (Day 3), and Final Copying and Proofreading (Day 4). The assessment clearly supports the Writing-as-a-Process instructional model.

Case 2: School district Y also conducts a direct writing assessment annually in May. Each student has a conference with his or her teacher to determine which paper from the student's portfolio to submit for assessment purposes. The papers in the portfolio have not been generated under standardized conditions but, rather, represent the ongoing work of the student for the year. All the papers were developed by the student, with as much or as little time allocated to each of the Writing-as-a-Process stages as he or she saw fit.

Is Case 1 an example of a performance assessment? Yes. The students are asked to perform specific behaviors that are to be assessed: to prove that they can write, the students produce a writing sample. Is Case 2 an example of a performance assessment? Yes, also. The portfolio contains numerous examples of actual student performance, although much of the structure associated with testing has been removed.

Is Case 1 an example of an authentic assessment? No. While the students are asked to perform the specific behavior to be assessed, the context is contrived. In real life, individuals seldom write under the conditions imposed during a standardized direct writing assessment. Is Case 2 an example of an authentic assessment? Yes. Performance is assessed in a context more like that encountered in real life: for example, students independently determined how long to spend on the various stages of the writing process, creating as many or as few rough drafts as they saw necessary to complete their final copies.

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As we can see, performance assessment refers to the kind of student response to be examined; authentic assessment refers to the context in which that response is performed. While not all performance assessments are authentic, it is difficult to imagine an authentic assessment that would not also be a performance assessment.

Criteria for Authenticity

To determine whether a given performance assessment is authentic, we must ask, "Authentic to what?" It is a seemingly simple question, but one whose answer may be complex. The following are just a few facets of authenticity: stimuli, task complexity, locus of control, motivation, spontaneity, resources, conditions, criteria, standards, consequences.

Some of these points may be more critical than others in a particular assessment. The assessor needs to make that determination. But in labeling an assessment as authentic, the assessor must specify in what respects the assessment is authentic.

Moreover, because authenticity has a multidimensional nature, some assessments are more authentic than others. Ironically, the most authentic assessment in many situations can probably not be contrived for purposes of testing, for then it would no longer be totally authentic. Educators and assessors must thus be explicit about which facets of authenticity are most critical.

Proposed Definitions

Two definitions may help further clarify the distinction between the two terms.

In a performance assessment, the student completes or demonstrates the same behavior that the assessor desires to measure. There is a minimal degree, if any, of inference involved. For example, if the behavior to be measured is writing, the student writes. The student does not complete multiple-choice questions about sentences and paragraphs, which instead measure the student's ability to proofread other people's writing, and require a high degree of inference about the student's ability to write.

In an authentic assessment, the student not only completes or demonstrates the desired behavior, but also does it in a real-life context. "Real life" may be in terms of the student (for example, the classroom) or an adult expectation. The significant criterion for the authenticity of a writing assessment might be that the locus of control rests with the student; that is, the student determines the topic, the time allocated, the pacing, and the conditions under which the writing sample is generated.

Implications for Educators

What significance do these definitions have for educators? First, when we read materials or attend presentations, we must determine whether the authors or presenters are sensitive to the distinction between the two terms. We must be particularly cautious of generalizing from information provided by individuals who use the terms interchangeably.

Second, we must become informed consumers when purchasing tests, assessment programs, or other materials being marketed as either performance or authentic assessments. Buzzwords sell, unfortunately, so beware.

Third, when planning an assessment, we must carefully identify the purpose in order to determine whether performance assessment — authentic or not — is relevant. Only appropriate matches will improve assessment of student learning. ◻

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ASSESSING STUDENT USE OF THE WRITING PROCESS
by Karen E. Thomsen

AGE LEVEL Middle to Upper Elementary
TYPE Portfolio
FOCUS Writing is a form of communication. Writing is a dynamic process requiring critical thinking at each stage.

Learning Outcome: The student will use the writing process to produce written work that exhibits a clear message and appropriate mechanical structure.

The term "Writing Workshop" is often used by teachers to describe the time that students spend on process writing. My thinking about students' writing and the writing process has been greatly influenced by reading the work of Donald Graves, Lucy McCormick Caulkins and Shelly Harwayne.

The fundamental beliefs that govern my Writing Workshop are:

1. Students should have the freedom to self-select their writing topics.
2. Students learn to write by writing about what they know best, their own personal experiences and interests.
3. Students need to have time to engage in the writing process.
4. Students need an audience with whom they can share their writing.

This assessment is designed to stretch from middle to upper elementary levels. Some of the related Language Arts

2.13 The student will share personal experiences and feelings in writing.
2.15 The student will understand how purpose and audience affect writing.
2.18 The student will express self in complete sentences.
2.21 The student will begin to use the writing process.
3.8 The student will revise written work.
3.9 The student will write brief fictional and non-fictional narratives.
3.11 The student will begin using revising and editing skills by experimenting with sentences.
3.13 The student will develop basic sentences into interrogative, imperative and declarative forms.
3.15 The student will write for a variety of purposes and audiences.
4.10 The student will use the writing process to develop paragraphs.
4.11 The student will revise writing to form compound sentences.
4.12 The student will edit and proofread written work
4.13 The student will vary written and oral communications according to purpose and audience
5.8 The student will select and narrow a topic in a writing assignment
5.9 The student will express ideas and feelings through writing.
5.10 The student will use metaphors and similes effectively.
5.14 The student will organize information.

ASSESSMENT PURPOSE

_X_ Making instructional decisions
A teacher can use the data from this assessment to adjust instruction for an individual or group.

_X_ Monitoring student progress in the classroom
A teacher can use the data from this assessment to monitor progress over time.

_X_ Communicating and using summative evaluation
A teacher can use the data from this assessment to communicate with parents, colleagues, principals and supervisors. Because the assessment involves looking at the student's work over a period of time it can also be considered a summative evaluation.

___ Monitoring student progress externally

_X_ Validating student achievement
A teacher can use the data form this assessment as well as the portfolio of student work to validate the student's achievement.

_X_ Evaluating programs
Student achievement in writing in a writing

workshop setting could be compared to student achievement in other types of writing programs.

___ Addressing Accountability

SETTING

This assessment was used in a second grade class of 20 students. The students represent a heterogeneous mix of academic ability. One student receives services from a learning disabilities specialist, seven students receive services from the Chapter I reading specialists, and one student receives services from the ESL teacher. Stone Spring Elementary school opened in the fall of 1993 and has a total population of 470 students. There are 4 classes at each grade level kindergarten through fifth with the exception of 3 classes at third grade. Stone Spring Elementary is one of four elementary schools in Harrisonburg City which has a population of about 30,000 residents.

ADMINISTRATION

For Teachers

The following components are essential during a writing workshop or time spent in process writing:

* The teacher conducts mini-lessons or models desired writing techniques.
* Students have the opportunity to write daily in notebooks or journals or they are given the time to engage in pre-writing strategies.
* Students self-select writing topics from notebook/journal entries and/or pre-writing activities.
* Students are given time to write, confer, revise, edit and publish their written work.
* Students have an opportunity to share their work with an audience of peers, teachers, and/or parents.

The Writing Workshop format and time frame that I currently use is as follows: Teacher mini-lesson, 5-10 minutes; sustained silent writing (in journal or notebook), 7-10 minutes; student declaration of plans for the day (also referred to as "status of the class"), 2-3 minutes; process writing/conferencing, 20-30 minutes; sharing, 7-10 minutes.

The teacher begins the writing period with a mini-lesson. Topics for mini-lessons usually begin with teaching expectations for the writing period and move to writing strategies the teacher wants the students to try. The most effective mini-lessons come from observing the students writing and determining what they need to learn to become better writers. Although the writing period begins with a whole group mini-lesson, mini-lessons can take place with individuals or small groups, as the need arises, any time during the process writing/conferencing time.

Students need to write about the things that are important to them. Writing daily in a journal or notebook provides an opportunity for students to do this. If students do not free write on a daily basis they will need sufficient time for pre-writing strategies such as brainstorming before they are asked to select a writing topic.

Following the time that students write in their journals they are asked to declare their plans for the day. This helps the student to internalize the writing process as well as focus on a task that they know they will be held accountable for. The teacher calls each students' name and marks a code indicating where that student is in the writing process for the piece they are working on. (See form for Status of the Class).

Students are then given time to write, conference with peers and/or the teacher, revise, edit or publish their work. This is a time when students move about freely but with a purpose. The noise level in the classroom should be expected to rise as students confer with each other about their writing.

The writing period ends with sharing by one or more students. The piece shared may be a piece in progress or a published work. The teacher should state the purpose of the sharing. For example, the student may be sharing to get feedback from the whole group or they may be celebrating a published piece.

The Look Fors for each stage of the writing process are posted in the room and discussed frequently with the students. The assessment checklist is used every time the student publishes a piece of writing. It is completed by the teacher and reviewed with the student during a conference. The published piece also goes home for a parent evaluation. Finally, the student completes a self-evaluation. A copy of the students' published piece and all three assessment forms are put into the students' writing folder. Each semester students will select two pieces from their writing folder to put into a writing portfolio. Twice a year students will have the opportunity to share their portfolio with their parents and teacher during a conference.

Materials

* bound notebook for daily writing
* pencils
* looseleaf notebook paper or other paper for writing drafts
* pocket folder for holding pieces in progress
* copies of peer conference questions
* colored pens for revising during or after conferences or for editing.

LOOK-FORS

Look Fors are printed on a chart for students to refer to. Students also have a copy of the look fors to keep in their writing folder. A good amount of time is spent going over the look fors with the students.

PREWRITING

1. I can select my own topic for writing.
2. I can use a pre writing strategy to develop the idea.

WRITING A DRAFT

1. I write using complete sentences.
2. I use details to support my ideas.
3. I use resources like the dictionary or encyclopedia when I need to.
4. My writing is well organized with a beginning, middle and end.
5. My writing has an interesting beginning.

REVISING

1. I share my writing with others and record the feedback they give me.
2. I revise my writing to make it more clear.

EDITING

1. I have edited my work for capitalization, spelling, punctuation and grammar.

PUBLISHING

1. My writing is neat and legible.
2. I share my writing with others.

RUBRIC and SCORING

O - Outstanding:	Student demonstrates consistent use of the look for
S - Satisfactory:	Student demonstrates partial or inconsistent use of the look for
N - Needs Improvement:	Student demonstrates little or no use of the look for

RECORD-KEEPING

Every time a student publishes a piece of writing the teacher collects all drafts and completes the writing assessment. The student completes the self-evaluation and the parent reads the piece and completes the parent assessment. All three assessments are then stapled to the drafts and together with the teacher conference notes for that piece are placed in a student folder kept by the teacher. Each semester the student will select two pieces from the folder to place in their portfolio. Twice a year the student may share his/her portfolio during a parent/teacher/student conference.

PARENT INVOLVEMENT

At the beginning of the year a letter is sent home explaining the writing process and Writers Workshop. Parents are involved in the writing process by reviewing their child's journal on a monthly basis and also by completing the assessment form on published pieces. An author's celebration is also held at the beginning of the second semester and parents are invited to come hear their children read their stories in small groups. Occasionally parents are involved in a writing assignment with their child.

TEACHER WRITING ASSESSMENT CHECKLIST

Writer's Name ______________________ Date ________________

Title of written work ______________________________________

Scoring Standard:

O - Outstanding:	Student demonstrates consistent use of the look for
S - Satisfactory:	Student demonstrates partial or inconsistent use of the look for
N - Needs Improvement:	Student demonstrates little or no use of the look for

LOOK FORS	O	S	N	COMMENTS
Prewriting 1. Self-selects writing topics and ideas.				
2. Uses a prewriting strategy.				
Writing a Draft 1. Writes in complete sentences.				
2. Detail sentences support topic sentence.				
3. Uses expressive vocabulary.				
4. Uses appropriate resources to support writing (dictionary, encyclopedia, thesaurus, etc.)				
5. Writing is well organized with beginning, middle, and end.				
Revising 1. Shares and discusses writing with others and accepts and records feedback received.				
2. Revises to improve clarity, meaning and sentence structure.				
Editing 1. Edits work for: spelling punctuation capitalization grammar				
Publishing 1. Writing is legible and neat				
2. Writing is shared with others.				

ADDITIONAL TEACHER COMMENTS:

SELF-EVALUATION CHECKLIST

Name ______________________________ Date ________________

Title of Written Work ______________________________________

Type of Writing ____

	YES	NEED TO IMPROVE
1. I spent enough time prewriting. My prewriting strategy was ______________________________ ______________________________		
2. My ideas are clear and well organized.		
3. I used lots of details to support my ideas.		
4. I used the feedback from conferences to improve my writing.		
5. I took time to revise my writing carefully.		
6. I wrote and interesting beginning.		
7. I edited my work for mistakes in spelling, punctuation, capitalization and grammar.		
8. I made a final copy that was as neat as possible.		

As a writer, what I did best on this piece was

As a writer, what I would like to do better is

Teacher comments:

PARENT ASSESSMENT FORM

Writer's Name ______________________________ Date ____________

Title of Written Work ______________________________

Directions: Please read your child's piece of writing and then complete this form.

	YES	NEEDS TO IMPROVE
1. Does the writing make sense?		
2. Does the writer use an interesting beginning?		
3. Are there enough details to make the writing clear and interesting?		
4. Is the work well organized with a beginning, middle and end?		
5. Has the writer used complete sentences?		
6. Has the writer used interesting vocabulary?		
7. Is the written work neat and legible?		

8. In this piece I like how the writer

9. The writer could make this piece better by

Assessed by ______________________________

STATUS OF THE CLASS

Code: J: Journal PW: prewriting D: Draft
PC: Peer conference TC: Teacher conference
P: Publish S: Share

STUDENT										DATES	

ASSESSMENT FOR LETTER-WRITING SKILLS

by June Battaile

AGE LEVEL	Primary through Adult (adapted for third grade)
TYPE	Product
FOCUS	Language Arts as creative process and writing process.

Language Arts

5.7 The student will write personal correspondence (emphasis on format and audience).

7.7 The student will publish writings (emphasis on mailing letters).

4.14 The student will give orally and in writing clear, understandable directions and explanations.

2.8 The student will increase listening, speaking, reading, and writing vocabularies.

3.9 The student will write brief fictional and non fictional narratives (emphasis is on fluency and a logical progression of thoughts and events).

3.14 The student will recreate sensory experiences (emphasis is on the ability to recall and communicate vividly the sensory aspects of past experiences).

2.12 The student will write manuscript letters, words, and numerals legibly and correctly from memory.

3.7 The student will write legibly and correctly in cursive style when appropriate.

Letter-writing is a way for people to get to know one another better. Personal thoughts, feelings, and experiences communicated in letters often are more in-depth than oral communication due to time, distance, and personal constraints. Letter-writing has a guaranteed audience. A journal of letters between student and teacher can serve the purposes of clarifying student ideas and understanding (write to learn). Indicating where a student needs help, and providing a vehicle for skills practice. In addition to letters between teacher and student, the same purposes can be served by letters between students. Also, communicating with pen pals in another state as a class is a very exciting experience for students.

Students can take on some of the responsibility for school/home communication by writing letters to their parents and receiving responses. Computers offer another opportunity to students through E-Mail and VAPEN.

ASSESSMENT PURPOSE

___X___ Making instructional decisions

By reading one anothers' letters, the teacher and students will learn what individuals and the group understand and what needs further instruction in content area. Ideas for mini-lessons in handwriting, content areas, language arts, and resource use can be based on the contents of letters.

___X___ Monitoring student progress in the classroom

Periodic assessment of letters by students and teacher and maintaining a portfolio of letters and assessments will provide the opportunity to evaluate progress over time.

___X___ Communicating and using summative evaluation

Periodic assessment by the teacher of a student's best letter to date recorded on a scoring grid serves as a record of student progress towards the exit outcomes. Each evaluation by the teacher is in the form of a conference with the student. This scoring grid and the portfolio of letters provides examples and evaluation during parent/teacher conferences.

____ Monitoring student progress externally

____ Validating student achievement

____ Evaluating programs

____ Addressing Accountability

SETTING

This assessment was tested in the third grade extension class of a school using parallel-block scheduling. There were 145 students communicating with their teacher, one another, and fictitious characters using a dialogue journal and a letter folder. Students receiving LD services did not attend extension class. The school is a 3-5 elementary of

504 students that serves the entire rural county.

ADMINISTRATION

For Teachers

Provided with examples of neat and legible typewritten, cursive, and printed letters that demonstrate concern and interest in the recipient and vivid, detailed, and logically narrated thoughts and experiences, students will write their first letters to the standards set by the examples. Using the letter writing scoring grid, student self-scoring chart (included in this document), or lists of look-fors developed and adapted by classes for their own use to evaluate the provided examples will build students' awareness of scoring criteria and ability to evaluate their own and others' letters. Frequent, documented, self- and teacher-assessment of their own letters will assist in developing letter quality and provide a record of skills development. Teachers score the student's best letter to date in a conference with the student a regular intervals. Using a student scoring chart (included) to provide guidance while writing provides another opportunity to improve letter-writing skills. Students can use a proofreading checklist (example included) to improve their rough draft.

Letters and copies, student scoring charts, and duplicates of letter writing scoring grids are filed in individual student letter folders. Dialogue letters, write-to-learn letters, and friendly letters may be assessed by the same criteria. Certain look-fors may be added or deleted for particular letter projects, depending on what the teacher and class wish to assess.

Materials

1. Lined notebook paper, stationary, copied stationary.
2. Spiral notebook (for dialogue letters nd write-to-learn).
3. Student scoring chart, scoring grid and criteria, and proofreading checklist.
4. Examples of letters that set the standard as well as some that do not and some that go beyond.
5. Funds for stamps if you will be mailing to pen pals.

For Learners

You will be writing and receiving letters on a regular basis in this class. You will write letters to friends in class, to me (the teacher), to your parents, and to pen pals in other parts of the country. To get the most enjoyment out of your letter writing and the letters you receive, we will work together to write letters that:

- are neat and readable
- show a real interest in the reader
- make sense and tell about things in a logical order
- describe things and ideas in detail
- use vivid, interesting words
- have a correct greeting, body and closing

LOOK-FORS

Worded for eight year olds

1) I showed that I am interested in the reader by writing about their life or asking about them at least one time. I have used three details that tell about one idea. (LA 5.7) Example: I had a great time at your house. We laughed at the puppies, ate the yummiest snacks, and saw great movies.

2) I told about one thought or experience with at least three details so that the reader could understand what I was describing. (LA 4.14, LA 3.9, LA 3.14) Example: The puppy was so cute. It was soft and warm. Its fur was short and white, except for a black spot on its right ear. It fit right in my two hands.

3) I used or added at least two vivid, interesting words that helped create meaning. (LA 2.8) Example: The squirrel made noises(chittered) as it went(scrambled) up the tree.

4) I told my thoughts in order and they make sense. (LA 3.9) Example: We ran down the stairs, turned on the lights, and looked at the Christmas tree.

5) My letter has a greeting with correct form, capitalization, and comma. (LA 5.7) Example: To my friend Robin,.

6) My letter has a closing with correct form, capitalization, and comma. (LA 5.7) Example: Wishing you luck on field day, Ann.

7) The body of my letter has at least one indented paragraph, correct margins, and a skipped line between body and greeting and body and closing. (LA 5.7)

8) My letter looks neat. (LA 7.7)

9) My letter is readable. (LA 7.7,2.2,3.7)

SCORING

Shortened Look-Fors with criteria for scoring

+ = assisted * = the expectation/independent

= beyond expectation/independent

1) Write or ask about reader using three details that tell about one idea (LA 5.7)
#5 writer displays a unique ability to relate to reader through unusually detailed comments that fit easily into the sequence of the letter
*4 one comment about reader with three or more supporting details
+3 at least one reader comment, supported by one or two details
+2 one or more comments about reader/no detail
+1 no mention of the reader's life

2) Tell about a thought or experience in enough detail to be understood (LA 4.14,3.9,3.14)
#5 thought developed through carefully chosen descriptors, sequenced to help reader understanding (4+ details)
*4 three clarifying details described a main idea
+3 two descriptive details/more were possible
+2 only one descriptive detail +1 no details/thoughts not understandable

3) Use or add two vivid, interesting words (LA 2.8)
#5 many carefully chosen, vivid interesting words and phrases used to convey meaning difficult new words used appropriately
*4 two words used effectively to add interest and meaning/student may have used resources to select them.
+3 may use thesaurus, dictionary, and/or peers for sources, but word(s) need to be more meaningful or appropriate
+2 minor attempt/word(s) not effective
+1 no effort to choose words

4) Tell thoughts in order/make sense (LA 3.9)
#5 involved, complex situations, thoughts, tasks are explained in a carefully sequenced manner that leaves no guess work as to meaning
*4 easily understood due to sequenced ideas and careful wording that makes sense
+3 letter sequences logically, gives meaning except for minor flaws
+2 some evidence of sequence, but ideas jump around/majority of ideas do not connect
+1 words do not make sense or follow sequence

Scoring for the following Look-fors is determined by how many of the subtasks were done (ie. four tasks = 4) starred item necessary in addition to other 4 for a 5.

5) Greeting has correct capitalization, comma and form (LA 5.7)
* vivid or unusual (but appropriate) greeting words or book-quality pictures (criteria follow)
- word(s) of greeting used (Dear, To, Hello)/begin at top left margin
- name of who letter is to (Mom, Jim, Santa)
- comma after name
- first letter of greeting capitalized/proper noun(s) capitalized

6) Closing has correct form, capitalization and a comma (LA 5.7)
* vivid or unusual (but appropriate) closing words or book quality pictures (criteria follows)
- closing word(s) (Love, Fondly, Your Friend,)/indented-preferably to right of middle
- writers name last
- comma after closing words and before writer's name
- first letter of closing and proper noun(s) capitalized

7) Body exhibits correct form (LA 5.7)
* body contains several paragraphs, each containing related ideas
- first paragraph indented
- new lines begin at left margin, except where indented for a new paragraph
- skipped line between greeting and body
- skipped line between body and closing

8) Publish/mail neat final copy. (LA 7.7)
* overall "look" of letter is so consistent, clean, and conforming to expectations that it took an unusual degree of effort and/or ability to create
- lines of writing appear straight and horizontal
- lettering is uniform in size
- complete erasures (begin over if too many smudges)
- lettering slants consistently in one direction

9) Letter is readable/legible (LA 7.7,2.12,3.7)
* spacing between letters, words, and lines and letter formation show exceptional ability and have combined to create an unusually legible letter
- spaces between words
- letters closely placed within words
- spaces between lines of writing
- letters almost as good as wall examples

10) Colored book-quality pictures (for assistance on Look-fors 5 and 6

* color and design go beyond 4 criteria in effort and ability

- lines, shapes, and areas are definite and appropriate in size
- color choices are reasonable as to purpose
- colored areas filled thoroughly (unless bare areas needed)
- color stays within intended area

RECORD-KEEPING

Students:

Students are responsible for maintaining a letter writing folder in which dated letters or copies are stored in the order that they are written. When students use a checklist, they staple it to the letter it was used for and store both in the folder. Students conference at least once in every six weeks with their teacher, assessing their best letter to date,. The teacher assess the letter and enters information onto the scoring grid which the student copies onto a grid of their own that is kept in their folder. Periodically, students answer open-ended questions about the letter writing experience. Written responses are dated and students store them in their folders.

Teacher:

Teachers keep records of observations made of students in the process of letter writing. These can be in the form of dated sticky notes collected on a sheet with the child's name and later entered into a narrative comment format. Teachers keep a notebook of scoring grids-one grid for each student. The teacher conferences with each student at least once every six weeks, assessing a recent letter and entering findings onto the grid. The narrative comments are dated and entered on a following sheet.

PARENT INVOLVEMENT

Following are suggestions for involving parents in helping their child become good communicators through letters:

1. Have the children introduce their parents to the goals and skills of letter writing by writing them a teacher-guided letter at the beginning of the year. The teacher can attach their own letter explaining the scope, goals, and record-keeping, the student checklist, and the scoring grid and criteria. Future dated letters from students to parents can serve as personal announcements for up-coming events, requests, projects, etc. By leaving a space at the bottom of each letter, parents can write a response that comes back to school and the letter can then be filed in the child's letter folder. Checklists can occasionally be included to give parents a chance to assess their child's developing skills.

2. To aid in focusing on letters at home, an at-home letter folder can be made and sent home. Its purpose is to be a collecting place for letters the family receives or writes (copies) that are significant to them in some way. These letters can serve as models and they can also be shared at school.

3. Parents can encourage their child's communication with relatives and friends by mail. thank you notes, friendly letters and post cards are encouraged by the parent providing their child with necessary materials-stamps, stationary or plain paper, envelopes, writing instruments. An occasional visit to the post office to look through and select stamp designs creates further interest.

4. Purchasing or creating a thesaurus together sets the child up for choosing alternate and more vivid words. Parents can play word games with their child where the child replaces a common word with a more descriptive one. If they watch a duck run into the water, the parent could pose the question, "What would be a better word than run?" Parent and child could brainstorm together for ideas. Questioning can also build more detailed descriptions. Taking the same example, descriptors for the duck, the water, and/or how the duck ran. These questions build detailed descriptions and help the child include enough details to enable another person to "see" the subject.

5. Creating games out of describing thoughts sequentially will help children use a system to create logical descriptions. At the breakfast table the parent could ask, "Name five things in order that you did before you got here." Other examples: "Can you tell me in order how we should wrap that gift?" "Can you describe our dog from nose to tail?"

6. Leading children in appropriate personal comments to make in greeting others will help in making reader contact in letters. After the basic greeting, modeling

interests, shared experiences will open new ideas to a child. Practicing this kind of communication when parent an child come together again after school and work will help.

7. Fujifilm PhotoPals is a program that links students from around the country as penpals with a photographic emphasis. The address is : Fujifilm PhotoPals, c/o E. Freeman, Scholastic Inc., PO Box 467, New York, NY 10012. TN 1-800-227-1817 ext. 123

LETTER WRITING: STUDENT SELF-SCORING CHART

Name________________________________
Date________________________________
Letter to ____________________________

Choose the symbol that tells how well you think you did on each task. Place it on the line in front to the task.
Sun = very well Star = OK Quarter moon = need help

IDEAS

_____ I asked or wrote about the life, activities, or interests of the reader at least once in detail.

____ I described an idea or experience at least once with three or more details to help others clearly understand.

____ I chose or replaced at least two words with vivid, interesting words to tell about my thoughts and feelings. (resources: thesaurus, dictionary, peers)

____ I told my thoughts in order and they make sense.

SKILLS

- My letter has a greeting with correct form, capitalization, and a comma.
- My letter has a closing with correct form, capitalization, and a comma.
- The body of my letter has at least one indented paragraph, correct margins, and a space that separates the body from the greeting and closing.

FINAL COPY

- My letter is neat.
- My letter is readable.

LETTER WRITING: SCORING GRID

Determine appropriate score for each look-for by consulting criteria and place it in the grid in the column of scores taken for the letter identified at the top.

Identify letter ______________________________

DATE						
___ reader contact/at least one time an idea is supported by three or more details						
___ one thought or experience described with three or more supporting details						
___ thoughts sequence and make sense						
___ greeting has correct form, capitalization, and comma						
___ body has at least one indented paragraph, correct margins, and space between it and greeting and closing						
___ letter is neat						
___ letter is readable						
___						
STAGE						

PROOFREADING-ROUGH DRAFT CHECKLIST (adapt to reflect current priorities)
Name ______________________________
Date ______________________________
Project ____________________________

Place a check on the first line in front of each item that you have done.

__ __ 1. I have reread my paper to be sure it makes sense.

__ __ 2. I have put a period (.) at the end of each sentence (wherever I come to a full stop).

__ __ 3. I have put a question mark (?) at the end of each question.

__ __ 4. I have begun all sentences with a capital letter. (The)

__ __ 5. I have begun all names of persons or places (proper nouns) with a capital letter. (Dyke)

__ __ 6. I have circled the words that I think may be misspelled. (kat)

__ __ 7. I checked for correct spellings of circled words in a dictionary, glossary, or with a friend. (kat)-(cat)

__ __ 8. I indented at the start of each paragraph.

LETTER WRITING STUDENT EVALUATION

Name ______________________________

1. Who do you most enjoy writing to ?

2. Who do you like receiving a letter from?

3. What is the hardest part of letter writing for you? Please explain why.

4. What is the best thing about your letters? Would people that read them agree?

5. Would you rather receive written, audio taped, or videotaped correspondence from a friend? Please share your reason.

CREATIVE WRITING DEVELOPMENT ASSESSMENT

by Ann Bohn

AGE LEVEL Early Elementary
TYPE Product
FOCUS Language Arts as Communication

Language Arts
1.10 Communicate ideas in writing.

ASSESSMENT PURPOSE

_X_ Making instructional decisions
_X_ Monitoring student progress in the classroom.
___ Communicating and using summative evaluation
___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

SETTING

The 23 third grade students at Nathanael Greene Elementary School in this classroom are heterogeneously grouped -- 10 read on first grade level and 13 students are now reading on 3rd grade level. This assessment is a year long effort.

ADMINISTRATION

For Teachers

Introduce the writing process. Discuss the prewriting phase as the phase where writers try to come up with ideas to write about. Illustrate webbing. Next, discuss the writing phase of the process as the time where their purpose is to get their ideas down on paper. Then focus on the revising phase. Illustrate revising sentences by showing examples of student writing before and after it was revised. Have students identify the changes. Help them to see that writing which uses a variety of sentence patterns is more interesting.

Model revising the sentences in a paragraph. Write the paragraph on the board, or use a transparency. Ask a student to read it aloud before you revise it. Ask the student to read it again after you revise it, and have the class discuss their reactions.

Have students work in small groups to move words and phrases to make their own writing more interesting. Model sentences or paragraphs which contain errors in capitalization, and punctuation. Have students work in pairs to locate and correct errors in capitalization and punctuation.

The teacher should conference with each child at least once a week. The student should bring his or her writing folder to the teacher and together they will discuss the writing. Here are some questions that may be helpful for the teacher to ask the student:

1. What do you like most in your writing?
2. Why do you like it?
3. What doesn't please you? Why?
4. What help do you need?
5. What questions do you have?

The teacher should make detailed, specific comments about the writing, using the look fors as a guide so that the student can get better at monitoring his/her own writing. After discussing the writing, the teacher should record in the students folder the thing that student knows. The student will then take the writing and place it in a portfolio. The teacher will give mini lessons through out the year to help teach those things the student continues to have problems with.

LOOK-FORS

WEBBING LOOK FORS:
- Student chooses a topic and webs it.

PREWRITING LOOK FORS:
- Student writes the ideas he or she organized in the prewriting stage.

WRITING LOOK-FORS:
- Student reads their 1st draft to two other students.
- Student revises (adding details, checking mechanics, spelling, capitalization, sentence structure, and punctuation).

SHARING LOOK-FORS:
- Student shares in one of the following ways: read out loud to whole class, tape it, or publish it.

SCORING

4. Student performs the task with elaboration.
3. Student performs the task consistently.
2. Student performs the task inconsistently.
1. Student does not perform the tasks.

PARENT INVOLVEMENT

At the beginning of the year, a syllabus of everything taught and going on in classroom goes home. Weekly homework sheet gives information on topics and procedures. Parent/teacher conference to discuss the writing process.

Child's writing and scoring scale will go home regularly. A parent letter will go home when the student has published a book. The letter has suggested ideas which the child and parent may do to together. Following is a sample letter to parents.

Dear Parents,

Your child has now completed this book or writing. Please take time to share the story together. Let your child try to tell you the story in his or her own words. Finally, choose one of the activities on the list to do together.

1. Tell each other your favorite part of the story.
2. Think of another story you know that this story reminds you of.
3. Write something that happened in the beginning, middle, and end of the story.

Now, sign below and ask your child to write about what you did together. Return the book or writing as soon as possible.

Thank you,

____________________ and I have shared
(child's name)

____________________ together by...
(book title)

____

Parent's signature)

Look Fors: Choose topic web it	Prewrite	Read to 2 students	Revise	Share

MATH AS PROBLEM-SOLVING

by Donna Hollins and Joette Crone

AGE LEVEL Early Elementary
TYPE Performance Task
FOCUS Mathematics as Problem Solving

In recent years, problem-solving has come to the forefront of mathematical instruction. Its significance has increased because many teachers and business professionals realize that our society is becoming more complex and technologically advanced. It is no longer realistic to just memorize algorithms. Our students must become problem-solvers, and schools must be able to give students and parents meaningful feedback on progress. Many localities, such as our own, have developed Standards of Learning which include problem-solving. (Orange Co. SOL's: 2.7, 3.7; Albemarle Co. SOL's 2.16, 2.29, 3.10) Our goal was to create criteria and expectations which could help a teacher monitor student progress in this important area of math.

ASSESSMENT PURPOSE

_X_ Making instructional decisions

Through observations of students' problem solving strategies, the teacher can make decisions on what instruction should be planned for with students in the area of problem solving. The teacher can note where similar deficiencies exist, and set up small group instruction if needed.

_X_ Monitoring student progress in the classroom

Student progress can be monitored through these observations, and the information is kept on the scoring sheet. This information will be shared with students as student and teacher evaluations are compared. Since problem solving is on-going several observations will be made on each student, and progress can be noted with each subsequent observation.

_X_ Communicating and using summative evaluation

The information gathered by the teacher can be shared with parents through conferences or narratives. Both of these ways of communicating depend upon the teacher having access to a meaningful and rich source of information. One of the aims of this assessment is to provide that source of information in a practical and thoughtful manner.

___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

SETTING

These criteria and expectations are designed to be used in a primary classroom with a heterogeneous population of students. It would be possible to administer this assessment in a variety of problem-solving situations. The teacher could use it in a cooperative group setting, pairs, or in a one-on-one interview session. The central focus would always be problem-solving tasks which were appropriate for primary children.

ADMINISTRATION

For Teachers

This explanation is broken into two parts. The first part is general guidelines for administering the assessment. The second part provides detailed descriptions of how two teachers implemented this assessment and the way that they dealt with such issues as student involvement, scoring, record-keeping, and parental communication.

Part 1--Guidelines

--The teacher needs to provide ample instruction and practice in problem-solving activities and language prior to using this assessment tool.

--Students need prior experience with problem-solving activities and the language before developing their own "look-fors".

--The "look-fors" (criteria) should be shared with students in their own terms or preferably have students develop their own "look-fors" based on their experiences with problem-solving. This will provide a more meaningful experience for the students.

--To truly monitor student progress, problem-solving needs to be an on-going process.

--Decide on criteria, expectations, scoring sheet, and record-keeping system before observing the assessment task.

--Problem-solving activities can range widely in depth and complexity. If the teacher is planning to gather information by observation, it is helpful to involve students for a significant amount of time and generate many verbal responses.This set of administrative directions was used in a heterogeneous second grade classroom. It is possible to extend its use to more grade levels. The activity described below was first introduced and practiced several times in a whole group situation. Only after the students seemed comfortable with the procedure did they work independently.

To make problem-solving more authentic for the students, it should be related to a current unit of study, a field trip experience or a spontaneous classroom event. The most authentic assessment of problem-solving is when students develop their own problems. It can be difficult to assess the spontaneous situations though, and sometimes it may be necessary to contrive situations to assess problem-solving skills.

(What's Your Problem? Penny Skinner, 1991. Heinemann)

In order to make a more realistic context for problem-solving, the teacher planned a unit of interest for the students about pets and other kinds of domestic animals. As a whole class the students made a graph about their favorite pets. Then the students took on the role of pet store owner, and they solved problems based on the information in their graph. They also contributed their own problems about pets which were collected into a class book. Almost any kind of unit could lend itself to this kind of mathematical extension. The primary focus would always need to be what is the most meaningful and motivating situation for the students.

A planned activity creates an opportunity for the teacher to observe and record the students' performances. Since problem-solving is on-going, the students will be observed a number of times on problem-solving skills. Information can be marked on the observation sheet, and then recorded on the scoring sheet using the rubric.

For Learners

First day: Today we are practicing graphing skills, and we are going to find out about favorite pets. (Teacher showed students the axes on the graph and their meanings. Students were then given a blank graph to use to construct their own). As soon as your graph is labeled, then you can go around and ask your friends what their favorite pet is, and then record that information on your graph. (The teacher and class then discussed the information on the graphs and constructed a "whole class" graph that was collected by secret ballet about favorite pets).

Second day: You are a pet shop owner. Use the graph for information about what your pet shop has in it. Then use the graph to solve these problems and write a problem of your own.

LOOK-FORS

The following criteria (look-fors) were developed to reflect the qualities of effective problem-solvers. Then expectations (rubric) were designed to show the levels of proficiency that may be found among young children. The criteria and expectations were created to be tools used in an on-going process of learning, instruction, and assessment.

"Look-Fors" (Teacher terms)

--The student perseveres through difficult parts while problem-solving.

--The student generates a variety of suitable strategies for solving the problem where appropriate.

--The student can explain the problem.

--The student monitors for own mistakes and makes changes in strategies as needed.

--The student reaches an accurate solution.

--The student explains or defends why the strategy for the problem works best.

"Look-Fors" (Student terms)

--I keep trying even through the hard parts.

--I can think of several ways to solve the problem when possible.

--I can explain the problem.

--I watch for my mistakes, and change strategies if I need to.

--I can find a solution for the problem that works.

--I can explain to someone why this strategy works best.

RUBRIC

5= Student can develop multiple strategies to solve the problemand choose the most effective method. Can defend the strategy to others, and explain why the chosen strategy was the most effective.

4= Student can solve the problem and is able to explain strategy used. Monitors for mistakes, and makes appropriate changes in strategy.

3 = Student is able to develop a strategy for solving the problem, but is unable to carry through and solve it. Has difficulty monitoring for errors.

2 = Student can explain the problem but is unable to develop strategies to solve the problem. Gives up easily.

1 = Student is unable to explain problem or solve it.

RECORD-KEEPING

See the attached form.

PARENT INVOLVEMENT

The following attachment is a parent letter which asks parents to reflect on their children as problem-solvers. The goal of sending the letter home is to bring parents into the assessment process and let them have an opportunity to respond. It does not ask the parents to "score" the child. Instead, its aim is to help parents become aware of the important problem-solving behaviors that they can be observing in their own children. A teacher could decide to send this letter home at the beginning and at the end of the year and note the differences in the responses. Encouraging parental involvement is a crucial part of the entire assessment process.

PARENT RESPONSE LETTER

Dear Parents,

We are working on problem-solving skills at school. Please take time to look at your child as a problem solver. Using the "look-fors" below, answer the following questions about your child. The students helped develop this list of "look-fors" based on what they think is important in solving problems. Your involvement will enhance your child's perspective on his/her own work. Thank you for your evaluation.

Student "Look-Fors"

--I keep trying even through the hard parts.
--I can think of several ways to solve the problem.
--I can explain the problem to someone else.
--I watch for my mistakes, and change strategies if I need to.
--I can find a solution that works for the problem.
--I can explain to someone why this strategy and solution works.

PARENT RESPONSE

1. Using the "look-fors", how would you describe your child as a problem-solver?

2. Does your child like to work on a problem alone or with someone else?

3. What can your child tell you about problem-solving?

4. What would you like your child to focus on for better problem-solving?

LOOK FORS

Teacher______________________________

Date ______________________________

Observation checklist

Student Name	Perseveres	Generates strategies	Explains problem	Monitors mistakes, makes changes	Defends best strategy

PET SHOP PROBLEMS

Names: ____________________ Date: __________

____

Use the information in the graph to help you solve the problems.

1. Now that you are a pet shop owner, you are very curious about the animals in your shop. You want to know how many paws there are in the shop. Can you find this out?

2. It is a busy day at the pet shop. First, a little girl comes in and buys a rabbit. Next, a grandmother comes to the shop, and she buys a dog and a cat for her grandchildren. Then, a dad comes in and buys a dog and iguana for his son. How many animals did you sell? How many animals are left in the shop now?

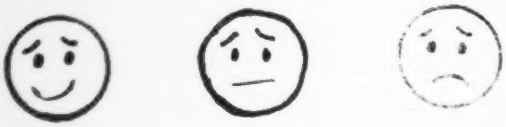
3. At the end of the day, you need to feed all of the animals. Each cat eats one can of pet food, and each dog eats two cans of pet food. How many cans of pet food will you need to feed the dogs and cats?

4. Can you write a number story problem for the pet shop?

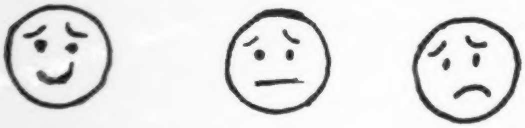
Name ________________________________

Student Checklist

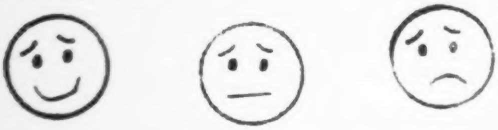
1. I shared my ideas today.



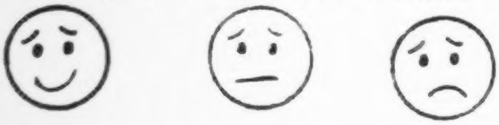
2. I read the whole problem before I started to write.



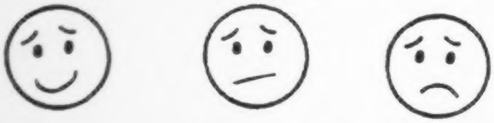
3. I did not give up.



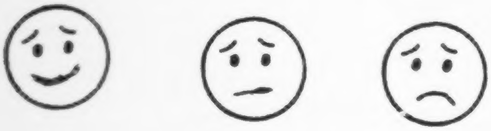
4. I like other people to help me solve the problem.



5. I checked my work after I finished.



6. I can tell other people how I did the problem.



Student Evaluation Sheet

Name ________________________________

Date ________________________________

Circle Yes or No for each sentence.

1. I shared my ideas today. Yes/No

2. I used my ideas to work on the problem. Yes/No

3. I listened to my friends' ideas. Yes/No

4. My idea solved the problem. Yes/No
   Here's how it worked......________________________________

____

____

5. There were different answers or ways to solve the problem in our group. Yes/No

6. I completed ____________ of the "look-fors".

Each child in the classroom has an individual recording sheet which would be kept in a math assessment notebook. Progress as problem-solvers is observed and written down throughout the year.

PROBLEM SOLVING		Name ________________ Assessment
Title:____________________ Type: Written Hands-On Project Other Group?: Yes No		
Title:____________________ Type: Written Hands-On Project Other Group?: Yes No		
Title:____________________ Type: Written Hands-On Project Other Group?: Yes No		
Title:____________________ Type: Written Hands-On Project Other Group?: Yes No		
Title:____________________ Type: Written Hands-On Project Other Group?: Yes No		
Title:____________________ Type: Written Hands-On Project Other Group?: Yes No		

A PROBABILITY AND STATISTICS ASSESSMENT

by Marie Graham

AGE LEVEL	Early and Upper Elementary
TYPE	Performance Task
FOCUS	Mathematics as problem solving, statistics and probability.
Mathematic	
3.21, 4.24	Solving non-routine problems
3.18, 4.21	Reading and constructing bar and picture graphs

ASSESSMENT PURPOSE

____ Making instructional decisions

__X__ Monitoring student progress in the classroom

The purpose of the checklist is to monitor student progress over a period of time. The checklist would follow the student from one grade level to the next. Each teacher would add to the checklist as skills are mastered.

__X__ Communicating and using summative evaluation

____ Monitoring student progress externally

____ Validating student achievement

____ Evaluating programs

____ Addressing Accountability

SETTING

This assessment tool was used in a heterogeneously mixed third grade class of 21 students. The class is one of three third grade classes in a K-5 elementary school of approximately 350 students.

ADMINISTRATION

For Teachers

The students are given the following problem:

PROBLEM

A cereal company found that sales improved when special treats and surprises were included in the boxes of cereal. The company has just put a new toy dinosaur in each of their boxes. There are six different kinds of dinosaurs in the complete set. When the company ships boxes of cereal to grocery stores they are very careful to ship the same number of each dinosaur. You would like to collect the complete set. About how many boxes of cereal do you think you would have to buy in order to get a complete set of six dinosaurs?

PROCEDURE

Part 1

Student are divided into pairs. They are given an opportunity to discuss the problem, to make an estimation, and then to explain in writing how they arrived at their estimation.

Part 2

Each pair is supplied with a paper bag, 6 colored cubes and a worksheet similar to Workmat 1 (in the appendix) for recording their work. Explain to students that it is impractical to have boxes of cereal with dinosaurs inside so the colored cubes will represent the six kinds of dinosaurs. Students are encouraged to suggest ways to set up an experiment that will help them to solve their problem. Their suggestions should be similar to the following.

- That they use the six colored cubes to represent the six kinds of dinosaurs.
- That they place the cubes into the bag removing one at time.
- That they replace the cube in the bag once its color has been recorded to represent the fact that there are more than one of each kind of dinosaur int he store.
- That the experiment is finished when all six colors have been drawn form the bag.

When the plans are in place for the experiment students perform the experiment several times in order to get a variety of results.

Part 3

While students are performing their experiments the teacher circulates among the groups interviewing each group encouraging them to articulate their experiments. When students have had an opportunity to perform the experiment several times and the teacher has had a chance to interview each group, students are given an opportunity to report findings to the class.

Part 4

Using an enlarged version of the Frequency distribution chart in the appendix, record results that were found by each group as they report them. When results are recorded questions similar to the following may be used in order to help students to draw conclusions about the data that they have gathered.

- Why was the chart started with 6 instead of 1?
- What was the fewest number of draws it took to get one of each of the six colors?
- What was the most number of draws it took?
- Which number of draws occurred most often?
- Which number of draws occurs in the middle?
- Which number of draws is the average? (Students may use calculators for this.)

The terms " mean, median, and mode" may be introduced.

Part 5

Each student then answers this question in writing "Explain how many boxes of cereal you now think you would have to buy in order to get a complete set of dinosaurs? Explain why you chose that number or numbers."

Materials

Workmats 1 and 2

Individual scoring sheets

For each pair of students - 6 colored cubes, paper bag, calculator, workmat

LOOK-FORS

Throughout the activity the teacher looks for the following in each student's performance.

Part 1 Estimation

That the student makes a prediction or estimation based on experiences with and prior knowledge of probability activities.

- *I can tell what I think will happen.*
- *I was right in what I thought would happen.*

That the student explains the rationale behind his prediction or the strategy used to make his estimation.

- *I can explain why I said what I thought would happen.*
- *I was right in what I said.*

Part 2 Design an Experiment

That the student participates in making plans for setting up an experiment to collect data to solve the problem. (Steps are listed in part 2 of the procedure.)

- *I helped plan the experiment.*
- *I helped write down what we found out.*

Part 3 Interview

The teacher will ask questions that will elicit the following understandings from the students:

- *The six colored cubes represent the six kinds of dinosaurs.*
- *One cube must be drawn form the bag to represent the fact that one box of cereal would be bought from the store at a time.*
- *After the color of each cube is recorded it is put back into the bag since there would be more than one of each kind of dinosaur in the store.*
- *The experiment is repeated several times because the same results would not be found each time and students want to compare several to see if similar results are found most of the time.*
- *Each experiment is finished when all six colors of cubes have been drawn - they would have collected all six dinosaurs.*

In my experiment I knew:

- The six cubes stand for the six dinosaurs.
- Each time I picked a cube it was like I was buying a box of cereal.

Part 4 Reporting Results

The student reports reasonable results to show that the data was collect properly - most answers should be between 7 and 18.

Part 5 Written Conclusion

That the student reports a reasonable number - depending on the distribution of the class.

That the student's written conclusions show that there is understanding of the problem. For instance, "Now I think 8 - 12 because it is rare to get all 6 colors on 6 tries. Sometimes you get doubles." or "Now I think I would have to buy 12 because that is the number that most of the people in the class got when they did their experiments.

RUBRIC

5. Student performs the task with unusual elaboration and insight. Offers assistance and explanations to others.
4. Student performs the task consistently and independently - all components of the task are present.
3. Student performs the task with a minor component missing - needs assistance in getting started on the task.
2. Student performs task with a major misunderstanding - needs a lot of assistance to perform task.
1. Student does not perform the task.

RECORD-KEEPING

1. Individual checklist of Learnings for this task.

2. Individual checklist of Learnings across grade levels.

PARENT INVOLVEMENT
An evaluation form for parents is included in this assessment package. There is a space for student score, teacher comments, and parent comments.

Workmat 1

Part 1

Estimate how many boxes of cereal you think you would have to buy to get a set of six dinosaurs. ______________________________

Explain why you think you would have to buy that number or those numbers.

____

____

____

____

Part 2

Design an experiment that would help you to solve your problem.

What materials will you use? __________________________________

How will you carry out your experiment? ___________________________

____

____

____

____

____

Workmat 2

How many boxes of cereal do you now think you would have to buy in order to get a complete set of dinosaurs? ______________________

Explain why you think as you do?

TOY IN THE CEREAL BOX

Name ____________________

PROBABILITY AND STATISTICS

INDIVIDUAL SCORE SHEET

PREDICTING	SCORE
Estimation is based on experience	
Rationale for estimation	
EXPERIMENTING	
Participation in setting up experiment	
COLLECTING AND RECORDING DATA	
Articulates steps in experiment	
Is collecting written data	
Is conducting experiment in a systematic way	
INTERPRETING DATA	
Results are reported	
Reasonable number is recorded	
Conclusion shows understanding of the problem	
TOTAL (45 possible)	

SCORING RUBRIC

5. Student performs the task with unusual elaboration and insight. Offers assistance and explanations to others.
4. Student performs the task consistently and independently-all components of the task are present.
3. Student performs the task with a minor component missing-needs assistance in getting started on the task.
2. Student performs task with a major misunderstanding-needs a lot of assistance to perform task.
1. Student does not perform the task.

CHECKLIST - PROBABILITY AND STATISTICS

COLLECTS AND ORGANIZES DATA				
From a picture				
From a story				
From a table				
From clues				
Draws a picture				
Makes a list				
Makes a schedule				
Conducts a survey				
Uses a time line				
Uses coordinate graph				
Uses mean and mode				
RECORDS AND INTERPRETS DATA				
From a picture				
From a story				
Makes a graph with manipulatives				
Makes a pictograph				
Makes a bar graph				
Makes a circle graph				
Makes a double-bar graph				
Completes a table				
Uses tally marks				
Uses a Venn Diagram				
Uses an experiment				
Uses a coordinate graph				
Uses mean and mode				

EXPERIMENTING AND PREDICTING				
Finds probability				
Predicts outcomes				
Simulates probability using a computer				
PROBABILITY				
Interprets independent events				
Predicts odds				
Makes predictions from a sample				

Reporting to Parents

MATH EVALUATION - PROBABILITY AND STATISTICS

Probability and Statistics is an important component in our math program. Our curriculum is based on the National Council of Teachers of Mathematics Standards for grades K - 4 and includes experiences with data analysis and probability so that students have opportunities to collect, organize, and describe data; to construct, read, and interpret displays of data; and to explore concepts of chance.

This evaluation form reflects the progress that your child is making as we explore and learn data analysis and probability in our ongoing unit of study.

Included with this evaluation form is a sample of the work that your child has done during the unit. Please examine the evaluation form and the work sample with your child. When you are finished, return the folder to school.

SKILL		**COMMENTS**
Collects and organizes data		
Records and interprets data		
Sets up and follows through with experiments		
Makes predictions based on experiments		

Scoring Rubric
4 Student performs task with unusual elaboration and insight
3 Student performs task independently
2 Student performs task only with support
1 Student does not perform task

PARENTS COMMENTS

ANALYZING DATA BY USING STATISTICAL CONCEPTS AND PROCESSES

by Becky Fisher

AGE LEVEL	Early and Upper Elementary
TYPE	Performance Task
FOCUS	Mathematics as statistics and probability

Mathematics

3.18 The student will read and construct simple bar or picture graphs.

- collect, organize, and describe data
- construct, read, and interpret displays of data
- collecting and analyzing data
- explore concepts of chance

The setting, as depicted here is contrived and should be adjusted for the particular students participating in the assessment. This assessment is designed for use after introductory instruction and practice with graphing. The assessment involves students organizing given information (a number of various empty aluminum drink cans) into data, interpreting this data to answer a question and providing a representation of the answer based on the data. Within this assessment, students are challenged to think, do, and apply, using "school math" to form a statement (or solution) of a somewhat realistic problem. The assessment focuses on collecting and analyzing data by using statistical concepts and processes in order to solve a problem.

ASSESSMENT PURPOSE

_X_ Making instructional decisions
_X_ Monitoring student progress in the classroom
___ Communicating and using summative evaluation
___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

* For further ideas and classroom connections, see "Making Cents of Snacktime" assessment. This assessment could be linked more directly to the classroom. For example, students could collect data regarding the favorite snack drink of the class members. They could then use this data to make purchases for a class project or for two weeks in advance.

ADMINISTRATION

For Teachers

This assessment takes between 45 minutes to 1 1/2 half hours, depending mainly upon teacher choices and students' understanding of and preparation for the tasks. The materials are simple, but the number and variety of aluminum drink cans provided per "task team" is central to what the students may learn from participating in this assessment. A "task team" may range from one to four students, depending upon assessment conditions. At least ten cans and at most 30 cans should be provided to each "task team". Providing potentially confusing types of cans such as Pepsi and Diet Pepsi (some students may consider these to be the same drink) or Mr. Pibb and Dr. Pepper (the cans are almost identical) will lead to more complete understanding of the discrimination abilities of the students. The reasoning used in sorting and labeling is of high interest for some purposes and should be supported. Be sure to clean the cans and check for potential dangers as students will be manipulating them throughout the assessment. To assess more complex thinking, provide students with cans that are not offered by the school drink machines and a list or picture of what is sold in the school machines after they have established "the" favorite drink. Follow this with a series of thought provoking questions to move the student to exploring the dilemma. What about those not sold in the machines at the school? How did they get there? Or, there are two selections of Diet Pepsi and only one selection of iced tea. Do you think this might make a difference in our data? What if all of the iced tea sold out quickly?

Materials

clean, empty aluminum cans
grid paper
blank paper
colored pencils
diagram showing drink machine selections (not needed for core assessment)

For Learners
Place the box of aluminum cans in front of student and say, "You know, this recycling box was completely empty yesterday, and now look how full it is. I wonder if there is some way of telling what the favorite soft drink of the teachers here is. Will you help me do this?"

To assess abilities to organize information into data to solve a problem. Provide the student prompt: **How would you determine the favorite drink of teachers here at school?**
Additional student prompt (if needed): Can you think of a way to determine the favorite drink of teachers here at school from the empty cans in this box?

LOOK-FOR #1: STUDENT ORGANIZES GIVEN INFORMATION INTO DATA
Scoring rubric
5 - Student sorts the cans based on reasonable attributes with complete accuracy, and describing the sorted groups in a variety of ways.
4 - Student sorts the cans based on reasonable attributes with complete accuracy.
3 - Student sorts the cans based on reasonable attributes with some minor errors.
2 - Student sorts the cans based on reasonable attributes (such as color of can or brand), but sorting is not sufficient to identify distinct beverage.

To assess abilities to interpret data to solve a problem provide the following student prompt:
In your opinion, what is the favorite drink of the teachers at our school? Why?

LOOK-FOR #2: STUDENT INTERPRETS DATA ACCURATELY
5 - Student states an opinion based on the data, has accurately interpreted the data, and continues interpretation to illustrate additional opinions.
4 - Student states an opinion based on the data and has accurately interpreted the data.
3 - Student states an opinion based on the data but has not accurately interpreted the data.
2 - Student states an opinion, but the opinion is not based on data.
1 - Student does not state an opinion.

To assess abilities to construct written displays of data, provide the following student prompt:
The principal needs to know how many and what kinds of drinks to order for the teachers. We need some way to take the data to the principal without carrying the cans around. Here's some grid paper, pencils, and a blank sheet of paper - put your data on paper for the principal.

LOOK-FOR #3: STUDENT PRESENTS DATA ON PAPER
Scoring rubric for Look-For #3 (rubric may be adjusted based on level of prompting required.)
5 - Student transfers data to paper with no flaws, using multiple strategies - a graph and a table, for example, or a graph and a note of summary.
4 - Student transfers data to paper with no flaws.
3 - Student transfers data to paper with minor flaws.
2 - Student transfers data to paper with major flaws.
1 - Student does not transfer data to paper.

RECORD-KEEPING
The original graph paper for the students.

PARENT INVOLVEMENT
Students could bring containers from home that would represent the preferences of their families. The class would work to analyze individual's data and post this data for a class analysis. This analysis could be compared to the analysis of drinks from the school's teacher's lounge. An analysis of student (child) preferences as compared to parent or teacher (adult) preferences could also take place. Parents should discuss with their children the process of budgeting (i.e., using mathematical information and insight to make projections and predictions) and of grocery shopping (i.e., making purchases in advance based on prior knowledge and preferences).

Graphing Template

Students Name ______________________________

Name of Interviewer ____________________________

Date ______________

Other important data:

Assessment Recording Sheet
Student's Name ______________________________
Name of interviewer ______________________________
Date ____________________

Other important data:

Interview:
Have you planned a way to determine the favorite drink of teachers at school? <Wait until the student is completely finished by their own assessment>

Do you have any questions? <record the student's questions and any responses you may give>

Tell me what the problem is about?

What are the main ideas related to this problem?

What is your strategy to solve this problem?

<may not need to ask this> What information do you need to solve this problem?

<may not need to ask this> How will you gather information needed to solve the problem

Why do you think your strategy will work?

PROBLEM SOLVING

The recycling box from the teacher's lounge is full and the machines need to be refilled. I just overheard the principal talking to the person who fills the machines. He needs to know what teachers like to drink while they're at school. I wonder if there is some way of telling what the favorite drink is. The empty cans are on your table.

Understand
1. **What is the problem?**
2. **List the information.**

Plan
1. **What strategy will you use to solve this problem?**
2. **Give a reasonable estimate.**

Solve
1. **Show your solution.**
2. **Write your answer in a sentence**

Look Back
1. **Why did your strategy work?**
2. **Name another strategy that might work.**

Checklist:

____ A. Understanding - develops a strategy to solve a problem
  1. restates the problem
  2. gathered information

____ B. Plan - collects, organizes, and describes data
  1. applies strategy to solve the problem
  2. collects, organizes, and gives a reasonable estimate

____ C. Solve - constructs a graph to communicate data
  1. transfers information to the graph
  2. effectively communicates solution

____ D. Look Back - makes inferences and interprets the data
  1. explains why particular inference is made
  2. generates more than one interpretation

Strengths	**Weaknesses**	**Comments**

Scoring Scale:

5 - Unusually high quality and beyond expectations.
4 - Meets expectation - student has successfully applied this skill.
3 - The skill is mastered but has a minor problem - almost there.
2 - The skill is present but with a major flaw, error, or omission.
1 - The skill is absent or not demonstrated.

ASSESSING CHILDREN'S THINKING USING CONSERVATION

by Carole Lear

AGE LEVEL Early Elementary
TYPE Performance Task
FOCUS Math as critical thinking.

This assessment determines whether a child has conservation of number. This information is used to plan the math program for the school year. This concept is very important in both addition and subtraction. The information from this assessment provides a convenient starting point. Until conservation is firmly established, it is hard for children to understand that subtraction is the inverse of addition. The average age for proficiency of conservation of number is seven. It has implications for grade placement in the elementary math program.

Mathematics
1.3 Awareness of conservation of numbers

ASSESSMENT PURPOSE

_X_ Making instructional decisions
A teacher uses the data from this assessment to determine the starting point for the math program for individual students.

_X_ Monitoring student progress in the classroom
A teacher uses the data from this assessment to monitor student progress. Students not having conservation of numbers are assessed on a regular basis until this concept is understood.

___ Communicating and using summative evaluation

_X_ Monitoring student progress externally
Observations and recording sheets are kept in the student's math folders. They will be shared with parents at conference time (three times a year). Eventually, they will become part of the students portfolio.

___ Validating student achievement

_X_ Evaluating programs
This assessment can be shared building wide to help plan the math program for the school. Teachers can work together to analyze the data.

___ Addressing Accountability

SETTING

Woodbrook School is a community school located in Woodbrook Subdivision in Albemarle County, composed of 196 students in grades K through five. The school has three K/1 combination classes, 2 second, 2 thirds, a fourth, a four/five combination and a fifth and does not qualify for Chapter 1 or have many free lunches. The parents are very involved in their children's education and expect a great deal from the teachers.

This assessment took place in a self-contained K/1 classroom in Albemarle County, with a teacher and a teaching assistant in the room with 21 children - 12 first graders and 9 kindergartners. Initially this activity occurred during the math time block, as children work free exploring math manipulatives during the first month of school.

ADMINISTRATION

For Teachers

This assessment is designed to assess children's level of thinking using conservation tasks. Although it focuses on conservation of number - number is not changed despite rearrangement of object -- it would be appropriate for use with all conservation tasks, as they are similar. I assess on a monthly basis those children not having conservation of number. I then plan reinforcement activities to help children develop this concept as it is the basis for most math concepts in the early grades.

For Learners

Each conservation task involves the following four phases--

1. *Establishing equivalence*
   Before introducing any transformation, it is essential that the child realize that the starting materials are equivalent.
2. *One of the material is transformed*
   This material is rearranged in full view of the child.
3. *The child judges the equivalence again*
   Check to see if the child is able to conserve the tested property despite appearances.
4. *The child justifies his response*
   I observe children at work during our math block and call children one at a time to me.

I tape record each response so that I can focus on the child's behavior rather than trying to write their responses. The child's behavior is written during the assessment and the verbatim responses are recorded at another time. I use 16 dinosaur counters, eight green and eight yellow. I put eight dinosaur counters in the top row and the other eight directly underneath.

1. "Are there the same number of dinosaurs in each row?"
   (Establishing Equivalency)
2. "The teacher rearranges (spreads out) the bottom row focusing the child's attention on the change. "Now watch what I do."
   (One material is transformed)
3. Check and see if child is able to conserve the number by asking, "Do I still have the same number of dinosaurs in each row?
   (Judging equivalency again)
4. Questions like, "How do you know?" "What makes you think so?" will encourage the child to give a reason.

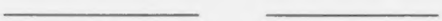
The following is a variation of the task.

1. Again set up as before
2. Transform top row. This time glob together.
3. "Are there the same number of yellow and green dinosaurs now?"
4. "What make you think so?" "How do you know?"

CONVERSATION OF LENGTH

Concept: The length of the string is unaffected by its shape of displacement

Set up: Need two strings the same length.



In front of child make one look like

Will an ant have just as far to walk on each string?

What makes you think that?

CONSERVATION OF SOLID SUBSTANCE

Start with 4 balls of clay. Have the child pick the 2 that have the same amount of clay.

"Now watch what I do. I'm going to make this one like a sausage."

"Do we still have the same amount of clay in each ball or do you have more in one of these pieces?"

"What make you think that?"

LOOK-FORS

1. Student recognizes that starting materials are equivalent.
2. Student focuses on transformation.
3. Student is able to solve the problem using the concept of conservation of number.
4. Student is able to apply his knowledge/understanding in a different situation.
5. Student is able to apply his thinking showing a strong depth of understanding.

SCORING

SCALE I

Does the child have an understanding of conservation of number.

Yes Not Yet

SCALE II

5. Child can apply concept to other conservation tasks.

String (length)	Yes/No
Clay (Volume)	Yes/No

4. Child can apply concept to another situation (glob) and elaborates on his own thinking.
3. Child clearly understands concept and is able to verbalize his/her thinking.
2. Child gives correct answer "yes", but is unable to verbalize his/her thinking.
1. No understanding of the task. Child does not understand equivalence....

RECORD-KEEPING

A notebook may be kept using the following recording sheet, one for each child. See recording sheet. These will be kept in student's math folders.

PARENT INVOLVEMENT

Parents are kept informed of their child's progress through conferences. Sharing the recording sheet and demonstrating the task helps parents better understand the concept and where their child performing. The parents will see their child's math folders during conferences, three times a year.

RECORDING SHEET

Name ____________________ Grade ________ Age ______ Date _____________

1. Establishing Equivalency
   Are there the same number of dinosaurs in each row?
   Yes Not yet
   If child is unable to establish equivalence, terminate the task and try a few months later.

2. One of the materials is transformed.
   Does child focus attention on change
   Yes No

3. Child judges equivalence again
   Do I still have the same number of dinosaurs in each row?
   Yes No

4. How do you know? What makes you say that? Anything else?
   Record verbatim answers.

CONSERVATION OF NUMBER (GLOB)

1. Yes Not Yet
2. Yes No
3. Yes No
4. verbatim/child said:

CONSERVATION OF LENGTH

1. Yes Not Yet
2. Yes No
3. Yes No
4. verbatim/child said:

CONSERVATION OF SOLID VOLUME

1. Yes Not Yet
2. Yes No
3. Yes No
4. verbatim/child said:

PATTERNS

by Paula White

AGE LEVEL	Early Elementary
TYPE	Performance Tasks
FOCUS	Mathematics as reasoning, patterns and relationships.

Mathematics

2.02 The students will count by 2's and 5's to 100.

NCTM Standard 3:

In grades K-4, the study of mathematics should emphasize reasoning so that students can:

- draw logical conclusions about mathematics
- use models, know facts, properties, and relationships to explain their thinking;
- justify their answers and solution processes;
- believe that mathematics makes sense

NCTM Standard 13:

In grades K-4, the mathematics curriculum should include the study of patterns and relationships so that students can:

- recognize, describe, extend, and create a wide variety of patterns;
- represent and describe mathematical relationships;
- explore the use of variables and open sentences to express relationships.

This assessment is to be used incidentally in the classrooms as children interact with the materials (the hundreds number chart, pattern blocks, junk boxes, etc.) Teachers can easily use this assessment through their normal daily interactions with the students. The children's interaction with pattern can be noted in the child's math portfolio. There is also a place on the developmental math checklist for comments about specific skill areas that includes room for comments on pattern knowledge. Analyze patterns, functions, mathematical relationships and other algebraic concepts by using arithmetic, algebraic, geometric, and graphic approaches

ASSESSMENT PURPOSE

_x_ Making instructional decisions
_x_ Monitoring student progress
_x_ Communicating and using summative evaluation
___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

SETTING

The setting for the mathematics assessment is a second grade classroom in a small rural school in Western Albemarle County. Virginia L. Murray Elementary has approximately 250 students, with two sections of second grade that are considered a team. Several special activities (such as library and art, for example) throughout the week involve students from both classrooms simultaneously. The children and two teachers consider themselves a second grade unit.

Virginia L. Murray has two special education resource teachers and two teaching assistants. We also have a speech teacher who is a part-time at-risk teacher and a guidance counselor. Each second grade classroom has two identified special education children in the regular classroom for the entire day, 3-5 at-risk students per classroom. A resource teacher works with the second grade for a minimum of forty-five minutes each morning and thirty minutes each afternoon. Each classroom also has a teaching assistant for approximately an hour in the morning and an hour and a half in the afternoon. Parent volunteers are abundant, as this school is in a very affluent part of Albemarle, and the children who attend this school are mostly from middle to upper- middle class families. Because there is more adult support in the afternoon, and fewer "special" classes such as music and library, the reading and language arts block is in the afternoon, and the math, science and social studies subjects are in the morning.

The classrooms are equipped with tables and chairs, not desks. Manipulatives and books are abundant. We work individually, with large groups reserved for discussions, community meetings, and sharing information with one another. Individual records are kept on each child for reading, writing, unit share and math. Portfolios are used extensively in both the language arts and math. The children are used to making choices in their activities. They seek and receive a lot of adult attention.

During math time the teachers interact with the children individually to extend their knowledge and skills. Anecdotal records are kept. A developmental math checklist is used with the parents in conferences.

ADMINISTRATION

For Teachers

Some possible tasks:

1. Ask the students to skip count by a variety of numbers (2's, 3's, 4's, 5's, and 10's at least) and color the numbers in with a dry erase marker or with colored ships on a laminated hundreds number chart. Students then analyze their marked numbers and describe any patterns they see.

Look Fors:

Does the student mark the board appropriately as asked?
Does the student recognize the pattern using appropriate vocabulary?
Does the student describe the pattern using appropriate vocabulary?
Does the student describe the mathematical relationship between the recurring numbers in each sequence (recognizing repetition and sequences of number patterns)?

2. Ask student to use an abacus and make as many different number combinations of ten as they can.

Look Fors:

Does the child use as pattern as she makes the number combinations?
Does the child recognize the pattern as she describes the number combinations?
Does the child describe the pattern as she talks about what he did?

3. Ask student to use pattern blocks, junk boxes, or cuisenaire rods to make patterns.

Look Fors:

Does the child make line patterns, circular patterns, or build patterns up?
Are patterns built symmetrically?
Are the patterns round? if so, does the student build it from the center out or add to each side equally?
How many different shapes or colors does the pattern have?

4. Ask student to use construction materials (Lincoln Logs, Tinker Toys, Legos/Duplos, etc.) in the classroom to build a structure.

Look Fors:

Does the child recognize patterns in the building he/she has crated?
Does the child describe the patterns seen in the structure?
Does the child make connections between a child-built structure and a real structure?
Does the child recognize and/or describe how builders may sue patterns to make buildings?
Does the child make connections between patterns and using mathematical thinking in building real structures?

5. Ask the student to describe patterns in real life. (What kinds of patterns are in nature? What kinds of patterns are in animals and/or people? What kinds of patterns can the student describe in time (daily routines, days of the week, months of the year, hours of the day, etc.) What kinds of patterns can the student recognize and/or describe in literature and music?)

Look Fors:

Does the student describe a variety of patterns in these different areas?
Is the student able to extend the patterns found in these real-life areas?

Materials

laminated 100's number chart
dry erase markers
abacus, pattern blocks
junk box, cuisenaire rods
constructions materials (Lincoln logs, tinker toys, Legos, Duplos, etc.)

RUBRIC

Score	Description
5	Student demonstrates understanding of the pattern that is of extremely high quality and beyond expectations. (For example, as they color the chart in, they may skip from line to line, recognizing numbers without having to count the patterns out as they color.)
4	Student is able to make & describe patterns, recognizing repetitions, describing mathematical relationships, & completing task at appropriate level.
3	Student is able to make patterns and describe in simplistic terms, but may not recognize repetitions or describe mathematical relationships.
2	Student may be able to make pattern, but may be unable to describe it or recognize repetitions or sequences.
1	Student is unable to make and/or describe pattern.

RECORD-KEEPING

During math time the teachers interact with the children individually to extend their knowledge and skills. Anecdotal records are kept. A developmental math checklist is used with the parents in conferences.

ECONOMIC COMMUNITY

by Christine Cole

AGE LEVEL	Early Elementary
TYPE	Simulation/Project
FOCUS	Math as problem solving and communication through the counting and use of money in a simulated classroom economic community.

Mathematics

2.16	Determine, by counting, the value of a collection of coins whose total is one dollar or less
2.20	Solve problems involving addition and subtraction
3.12	Select coins and one dollar bills to pay for a specific purchase
3.27	Use the symbols $, cent, and decimal point in representing money

Social Studies

2.7 Describe how people are dependent on each other for goods and services

Students are given ample opportunity to demonstrate group and planning skills in addition to the money management and economic principles that are the focus of assessment in the economic community.

ASSESSMENT PURPOSE

_X_ Making instructional decisions

A teacher can use information gathered by observation or record keeping forms to determine group or individual needs. Information gained through group or individual discussions helped to determine student needs. Videotaped activities provided valuable insights.

_X_ Monitoring student progress in the classroom

Data collected for several weeks can show growth and adjustment in students. This assessment could also be used for longer periods of time or more than once during the school year. Discussions and videotapes gave important feedback to help determine student progress. Record keeping forms and checklists helped keep track of the information.

_X_ Communicating and using summative evaluation

Counting money skills can be assessed in many different situations to give parents a clear view of the students' progress

___ Monitoring student progress externally

___ Validating student achievement

___ Evaluating programs

___ Addressing Accountability

SETTING

This assessment was piloted in a second grade classroom at Columbia Elementary School, a small rural school located in the southeastern district of Fluvanna County. The class consisted of 21 students grouped heterogeneously. Several developmental levels were represented with seven students having difficulty with second grade level math problems and three students demonstrating proficiency. Two students were classified as learning disabled.

ADMINISTRATION

For Teachers

Prior to introducing the economic community students were exposed to the concepts of consumer, producer, service worker, goods and services, taxes, resources and community through reading, writing and discussion. They were also taught how to count coins, record amounts of money and use a calculator to solve addition and subtractions problems.

To begin our project each student was given $6.00 of play "money" four one dollar bills and $2.00 in coins. They were told that they could earn money for good behavior, study skills and school work. They were put into groups of four to five students in order to plan and run their own stores. We brainstormed as a whole group in order to establish look-fors.

Student payment was based on the needs of the pilot class, but could be adapted for any group. The students were paid once a week. At first they were paid in cash, but later received direct deposit into bank accounts. They were paid $.10 each for good listening at our morning opening exercises, good lunchroom behavior, and turning in homework on time. This gave each student an opportunity to earn up to $1.40 a week and helped to improve our classroom in three areas of need. During a two week period students were also given an opportunity to earn additional money by working in groups on class work in reading and social studies. They worked cooperatively (without teacher assistance) in groups on worksheets. Each member of the group received payment for every worksheet turned in. Correct papers earned $.10. Papers with minor errors earned $.05. Other papers were paid nothing, but papers not turned in meant deductions for the group. Group earnings ranged from $.20 per person to $2.00 per person.

Students were very eager to produce goods to sell in their stores. However, the groups which I established quickly dissolved as students expressed their desire to form their own partnerships. This worked well and provided an additional opportunity for student choice. I opened a warehouse to provide the resources that students needed for production of goods. Warehouse materials included a variety of craft materials that were added to each week as determined by students' demands. Quantities and prices were based on supply and demand and fairly comparable to real stores. Students were also allowed to use items found in nature such as rocks or shells. They were not allowed to bring items or materials from home that were purchased, as this would give some an economic advantage. Depending on our schedule some amount of time was given each week for students to work on planning and production. However, many students gathered together during morning exploratory time or indoor recess when there was inclement weather. Production materials were stored in desks or on a shelf in the classroom. Each store was allowed to open once or twice a week depending on available time. Students would set up stores by displaying items on one of four empty tables at the back of the classroom. Some students chose to use signs, price displays, boxes or display pads. Stores usually stayed open for 15 to 20 minutes. Then a second group of stores could open for the same length of time. We had seven stores so all could operate in a 40 minute period. Service workers in the stores used calculators to add purchase prices and figure change.

When we determined our look-fors at the beginning of the project they were centered around a discussion of money management. The students came up with: save some money, make money from stores, count money and make change. After the first week I added two more: make a budget, and use a calculator. Because the students' first concern was with saving money I opened a bank during our first week.

Students were encouraged to open bank accounts as a means of saving money. Their money could earn 5% interest a week (Slightly unrealistic, but necessary for them to see any growth in their accounts with such small balances). Sixteen students opened accounts the first week with most depositing $1.00 or $2.00. After three weeks, only two students did not have accounts. At this time I gave them each an account to start paying them through direct deposit.

The bank opened once a week giving each student an opportunity to deposit or withdraw money. Prior to opening the bank each week I would give each student a deposit slip with his/her deposited pay, interest and balance of the account.

Then each student was required to fill out a budget form that indicated how much money he/she had, a plan for banking, and a plan for spending. Finally, the bank would open. Students were required to fill in a deposit or withdrawal amount on a ticket. Then I would complete the forms with their account numbers and new balances and return to them for receipts of the transactions. As an added incentive to save money, students are able to spend all the money they saved at a special store at the end of the project. The store has a variety of books including sticker, activity and coloring books, pencils, markers, bookmarks, puzzles, sidewalk chalk, pinwheels, and various science materials.

Twice during our project I collected all the bags of money, counted and recorded the amounts. This was used as an assessment tool to determine the accuracy of their budget sheets and to determine exactly how much money each student had. This was done again at the end in order to let each student know how much he/she had altogether and in comparison to each other.

Throughout the project several questions and issues came up. Sometimes I would talk with an individual or small group, but at other times we met as a whole group for discussions. Individuals or small groups were helped with counting money, using calculators, solving problems of materials or partnerships. Several questions that we discussed with the whole group were: Can someone buy your goods and sell them in their store? Can someone sell things on the side - not in their store or during store hours? What should you charge for items? (This lead to a discussion of profit) What happens if someone steals from your store? (We had on student accused who was later found innocent at a hearing in front of a panel of students). What if nobody buys things at your store? (We discussed supply and demand, and market research).

Our economic community ran for six weeks. We spent about three 40-minute periods a week on the activities. Students often worked on producing goods during any free time they could find.

The students were videotaped several times throughout the unit, particularly while operating their store. This provided valuable assessment information.

Materials

Play money (coins, and one dollar bills)
Materials to sell in warehouse
Items to be sold at final store
Camcorder and videotape

For Learners

Students initially needed guidance in completing a budget. They had no difficulty with the self-evaluation form. They worked enthusiastically on producing goods and managing stores without assistance.

LOOK-FORS

1. I saved money.
2. I made money from my store.
3. I counted money.
4. I made change.
5. I made a budget
6. I used a calculator.

RUBRIC

5 = I can do it easily.
4 = I can do it by myself.
3 = I need a little help.
2 = I am starting to do it.
1 = I can't do it.

SCORING

After the student completes the self-evaluation checklists they each had a conference with me. We discussed each look-for and agreed on a score from the rubric for each item. I presented the bank records, budget sheets, class rankings for money saved and self-evaluation sheets. Together we examined each item and discussed how well the student met the look-fors. Each student also had to perform the tasks of counting money, using the calculater to solve problems, and making change during our conference. If the student score was unrealistic then I asked for justification or presented the forms and evidence of skills from the tasks just performed to help the student come up with an appropriate score. All of the students except one had scored themselves as I would have. A couple actually scored themselves a little lower than I expected.

RECORD-KEEPING

Forms (attached): Observation Form
Bank account record- shows student's savings
Deposit/Withdrawal slips- for feedback to student
Budget- to assist the student in planning
Student self-evaluation checklist
Look-for checklist- for student/teacher conference

*For keeping track of payments to students I used a class checklist.

PARENT INVOLVEMENT

I kept parents informed about our economic community through a newsletter and report cards. I also have a letter to parents on counting money that can be sent home periodically (see attached).

NAME______________________________ **ACCOUNT #**____________________

DATE	DEPOSIT	INTEREST	WITHDRAWAL	BALANCE

ACCOUNT #

DEPOSIT ____________________

WITHDRAWAL ____________________

INTEREST ____________________

BALANCE ____________________

ACCOUNT #

DEPOSIT ____________________

WITHDRAWAL ____________________

INTEREST ____________________

BALANCE ____________________

ACCOUNT #

DEPOSIT ____________________

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ACCOUNT #

DEPOSIT ____________________

WITHDRAWAL ____________________

INTEREST ____________________

BALANCE ____________________

ACCOUNT #

DEPOSIT ____________________

WITHDRAWAL ____________________

INTEREST ____________________

BALANCE ____________________

BUDGET

Name ________________ **Date** ____________

Cash $ ____ . ______

Bank + ____ . ______

Total $ ____ . ______

I plan to deposit/withdraw $ ____ . ______
at the bank. (circle one)

I plan to spend $ ____ . ______ at the store.

List Needs

1.
2.
3.
4.
5.
6.
7.
8.

STUDENT SELF-EVALUATION CHECKLIST

NAME________________________________**DATE**____________

Saved Money
Saved a little **Saved a lot**

————+————+————+————+————+—

Made Money from Store
Made a little **Made a lot**

————+————+————+————+————+—

Count Money
Need a lot of help **Can do easily**

————+————+————+————+————+—

Make Change
Need a lot of help **Can do easily**

————+————+————+————+————+—

Make a Budget
Need a lot of help **Can do easily**

————+————+————+————+————+—

Use a Calculator
Need a lot of help **Can do easily**

————+————+————+————+————+—

NAME________________________________ DATE_________________________

LOOK-FORS

___ I saved money

___ I made money from my store

___ I counted money.

___ I made change.

___ I made a budget.

___ I used a calculator.

RUBRIC

5= I can do it easily.

4= I can do it by myself.

3= I am starting to do it.

2= I am starting to do it.

1= I can't do it.

Dear Parents,

Your child has been learning to count coins in amounts up to $1.00. The following list shows what skills are looked for in the classroom. The ones that are checked have been successfully completed.

________ 1. Identifies coins and tells their values.
________ 2. Explains how to group coins to count them.
________ 3. Counts on from 25 by ones, fives, tens and twenty-fives.
________ 4. Counts groups of coins to $1.00.
________ 5. Selects coins to make amounts of money given up to $1.00

Please help your child answer the following questions:

1. Were you able to count all the groups of coins?

2. What problems did you have?

3. What can you do to improve your skills in counting money?

OBSERVATION FORM

NAME	MAKE $	COUNT $	MAKE CHANGE	USE CALCULATOR

USING PATTERNS TO COUNT MONEY

by Christine Cole

AGE LEVEL Early and Upper Elementary
TYPE Performance Task
FOCUS Mathematics as problem-solving

Mathematics

2.02	count by fives
2.21	determine the next sequence of terms in a given pattern
2.02	identify coins
2.02	determine the value of a collection of coins whose value is $1.00 or less

ASSESSMENT PURPOSE

X Making instructional decisions
X Monitoring student progress in the classroom
X Communicating and using summative evaluation
__ Monitoring student progress externally
__ Validating student achievement
__ Evaluating programs
__ Addressing Accountability

SETTING

Columbia Elementary is a small rural school located in the southeastern district of Fluvanna County. There are 110 second-graders in five classrooms. There are an additional twenty students in two classrooms - Chapter I four-year olds and preschool handicapped. Parental involvement is good. This assessment was used in a self-contained classroom of 22 second-grade students (ages 6-7) grouped heterogeneously.

ADMINISTRATION

For Teachers

Procedure

Have the student do the following:

1. identify and tell value of each denomination.
2. Explain an appropriate strategy for counting coins.
3. Count on from 25 by ones, fives, tens and twenty-fives.
4. Count at least 5 different combinations of coins with values to $1.00.
5. Make amounts of money given, up to $1.00 (5 problems).

Materials

Coins (several of each denomination)

LOOK-FORS and RUBRIC

_____ 1. Student is able identify coins and tell their value.
_____ 2. Student can explain an appropriate strategy for grouping coins to count them.
_____ 3. Student is able to count on from 25 by ones, fives, tens, and twenty-fives.
_____ 4. Student is able to determine the value of coins to $1.00.
_____ 5. Student can select coins to make designated amount of money to $1.00.

5 = Student can easily count and make combinations of coins.
4 = Student can count and make combinations of coins with little or no error.
3 = Student can count and make most combinations of coins but some errors still present.
2 = Student is beginning to count coins and make some amount but with several errors.
1 = Student is unable to identify coins and their value, does not have an appropriate strategy for grouping coins or cannot count on from 25 by ones, fives, tens, and twenty-fives.

RECORD-KEEPING

Use the assessment instrument sheet to record results. Record the Student's name and the date of the assessment at the top. Use the spaces in front of the look-fors to check off acquired skills.

Circle the number of the score given to the student. Use any available space on the page for anecdotal records.

PARENT INVOLVEMENT
The classroom teacher uses this assessment in the classroom with individuals to determine each student's ability to count money. The results are shared with students and parents through the use of a parental involvement/student self-evaluation form. The results are available in the educational system by putting the completed assessment instrument in the student's math portfolio.

Dear Parents,

Your child has been learning to count coins in amount up to $1.00. The following list show what skills are looked for in the classroom. The ones that are checked have been successfully completed.

_____ 1. Identifies coins and tell their value.

_____ 2. Explains how to group coins to count them.

_____ 3. Counts on from 25 by ones, fives, tens, and twenty-fives.

_____ 4. Counts groups of coins to $1.00.

_____ 5. Selects coins to make amounts of money given up to $1.00.

Please help your child answer the following questions:

1. Were you able to count all the groups of coins?

2. What problems did you have?

3. What can you do to improve your skills in counting money?

MONEY ASSESSMENT

by Nancy Lam, Donna Barber and Peggy Simpson

AGE LEVEL	Early and Upper Elementary
TYPE	Performance Task and Checklist
FOCUS	Mathematics as Problem Solving and Communication

Mathematics as problem solving, as communication, mathematical connections and number Sense and Numeration

Mathematics

2.15 The student will identify coins.

2.16/3.11 The student will determine the value of coins (pennies, nickels, dimes, quarters half-dollars) totaling a dollar or less.

ASSESSMENT PURPOSE

_x_ Making instructional decisions

This assessment can be used to answer the following questions: Where are my students in terms of understanding about money? What do I need to teach about money? i.e. coin recognition, value of coins, counting coins, efficiency with coins.

_X_ Monitoring student progress in the classroom

How much progress have they made?
Are they using only dimes and pennies?
Are they using quarters and half-dollars?
Are they finding a variety of combinations?
Can they find the amount using the smallest amount of coins?

_X_ Communicating and using summative evaluation

This form may be used as a way of reporting progress made. Teacher comments on counting and problem-solving strategies are useful. Keep this assessment in a student portfolio for reference.

___ Monitoring student progress externally

___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

SETTING

A team of Rockingham County second grade teachers were asked by the Math supervisor to develop a series of assessments to go along with the manipulative based I Can! (Macmillan Series). The following is an outgrowth of this request.

ADMINISTRATION

For Teachers

This assessment can be given at any time to determine a child's understanding of coins. The children complete the chart at their seats and model answers for the teacher. The children use coins, or coin models to show as many combinations as they can that total any given amount as selected and recorded by the teacher and the children record their combination on a prepared chart. Then children are asked to select one combination and write clues to identify the coins, such as "I have six coins that equal $.78. Three of the coins are the same. What coins do I have?"

- The teacher models for the class the procedure of finding and recording as many combinations of $.28 for the class on the chart having children identify the combination that uses the smallest number of coins.
- The teacher is to give each child a "piggy bank" bag of coins with 4 quarters, 10 dimes, 10 nickels, and 8 pennies. The teacher may choose the number of coins and amount based on each child's abilities with money. The teacher will ask the children to find as many combinations as possible for a given amount, reminding them to look for the one combination that uses the smallest number of coins. The children then will record those combinations on the recording sheet. (This can be done as a group or individually, as children's learning pace dictates).
- During the work time students model some of their combinations for the teacher. During this time the teacher can also note counting and problem solving strategies used, and pinpoint areas of difficulty.
- At the end of the assessment the children are asked to choose one of their combinations to write clues for. These can be shared with the

class. For example "I have six coins that total $.78. Three of the coins are the same. What coins do I have?"

- This math assessment can be adapted for students with varying abilities in the following ways:
  1. Give the student a bag with fewer coins and ask them to make a smaller number of combinations.
  2. Give the student a bag with fewer coins and ask them to show a smaller amount of money.

Materials

- Prepared coin chart (see attached).
- Variety of quarters, dimes, nickels, and pennies (or coin models) for each child

LOOK-FORS

1. I found at least 4 ways to make the total amount.
2. I recorded each way so others could understand it.
3. I found a way that uses the least number of coins.
4. I counted at least one way for my teacher.
5. I wrote clues that others could understand.

RUBRIC

5- The child accurately displays the given amount and uses a variety of coins in more than four different ways including the combination that uses the fewest number of coins and records the combinations accurately. Has clearly written clues for one of the combinations. Demonstrates with ease counting coins for the teacher.

4- The child accurately displays the given amount and uses a variety of coins in more than four different ways. Records the combinations accurately and can demonstrate with ease the counting of coins for the teacher. The child may not have shown the combination with the fewest number of coins or may not have written clear clues for a combination.

3- The child accurately displays the given amount in less than four ways or the child used a limited variety of coins. The child may have trouble counting coins or recording combinations independently, has difficulty generating clues.

2- The child can only display the amount one way or cannot record the results.

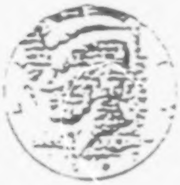
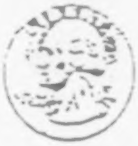
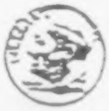
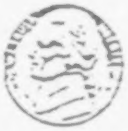
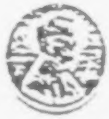
1- Cannot display the amount with coins.

RECORD-KEEPING

See attached sheet

PARENT INVOLVEMENT

This assessment can be shared with parents as a part of a child's math portfolio.

Amount	Dollars	Half-Dollars	Quarters	Dimes	Nickels	Pennies

276

277

MONEY	NAME													
Recognize coin by name: Penny														
Nickel														
Dime														
Quarter														
Half-Dollar														
Dollar														
Recognize coin by amount: Penny														
Nickel														
Dime														
Quarter														
Half-Dollar														
Dollar														
Counts Coins: Pennies up to 10 cents														
One nickel plus pennies up to $.10														
Nickels by 5's														
Dimes by 10's														
Nickels, dimes, and pennies up to $1.00														
Quarters by 25's up to $1.00														
Counts coins: Quarters & Dimes up to $1.00														
Quarters, Nickels, Dimes, & Pennies up to $1.00														

Any mixture of coins up to $1.00														
Recognizes Bills: One Dollar														
Five Dollars														
Ten Dollars														
Twenty Dollars														
Counts Coins and Bills up to: $5.00														
$10.00														
$20.00														
Counts Coins and Bills up to: $5.00														
$10.00														
$20.00														
Selects Coins and Bills for a specific purchase up to: $1.00														
$2.00														
$3.00														
$5.00														
$10.00														
$20.00														
Makes Change using Coins and Bills up to: $1.00														
$2.00														
$3.00														
Makes Change using Coins and Bills up to: $5.00														
$10.00														
$20.00														

Adds and Subtracts Money up to: $.10														
$1.00 without regrouping														
$1.00 with regrouping														
$5.00														
$10.00														
$50.00														

COUNTING AND SPENDING MONEY

by Ann Bohn and Marida Lamb

AGE LEVEL Third Grade
TYPE Performance Task
FOCUS Mathematics as problem solving, Mathematical Connections, Number Sense and Numeration

Mathematics
3.11 Determine value of collection of coins (pennies, nickels, dimes, quarters and half-dollars) whose total is $1 or less.
3.12 Given a collection of money will select coins and $1 bills to pay for specific purchase.

The concept of money is one eight and nine year olds need to know. Whether they are buying ice cream, paying for lunch, or buying school supplies, third graders need to be able to identify coins and know their value individually and collectively. This allows students to handle different coins, recognize both sides of each coin, add and subtract money amounts and make purchases with confidence.

ASSESSMENT PURPOSE

_X_ Making instructional decisions
Student responses indicate if student recognizes coins and knows their value. This information will determine whether teacher uses more hands on activities or whether the student is ready to purchase and make change.
_X_ Monitoring student progress in the classroom
Teacher will review response sheets to see if additional practice is needed.
_X_ Communicating and using summative evaluation
Data from this assessment can be reported to parents and others as a summative measure.
___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

SETTING

The setting is Nathanael Greene Elementary School in rural Greene County. There are approximately 540 students in grades 3-5. This lesson will be given to a 3rd grade class during our units time which is about 45 minutes long. This third grade classroom consists of a group of 24 children with varied abilities.

ADMINISTRATION

For Teachers

Students identify pennies as being 1 cent, nickels as 5 cents, dimes as 10 cents, quarters as 25 cents, and half-dollars as 50 cents. Also $1 bills are identified.

Prior time spent with money is necessary. A chart of different coins could be displayed to check if students recognize coins and their value. This will tell us if students know coins and their value. A task to determine individual knowledge follows:

> Students will be introduced to strategies to count by 5 and 10, etc. and to count big money first. Paper and pencil to add on will be encouraged and modeled. Children are in learning groups of 4 (or 5). Each group is given a numbered card of money (Money is taped on.) Money is displayed with heads and tails up randomly. Student is asked to count the money and put amount on answer sheet by corresponding card number. Then student passes card to neighbor who does the same and answers on his answer sheet. Group does this and then accepts a second card and follows same steps. Each card is numbered and has a different money value displayed. After all groups have finished, each group will self-check by revealing correct answer on back of card.

Materials

- Cards with money taped on. Each card is numbered and has a different money value displayed.
- Answer sheets for each student.
- Chart with every child's name. Used to monitor student's progress.

LOOK-FORS

1. I know the value of each coin.
2. I can add money.
3. I can write money amounts using $ and .(decimal) symbols.

SCORING

Five out of 6 correct answers should be achieved for 80% accuracy. This will tell us which concepts need to be retaught. Those students with 80% accuracy can go on to specific purchases in the store (which is the next task).

5-6 = I did a good job.
3-4 = I did o.k.
1-2 = I've got to work harder.

RECORD KEEPING

COUNTING AND SPENDING MONEY

** Tell 3 things you learned about counting money.

1. ____

2. ____

3. ____

What was the hardest part for you?
I had a good time
____ Yes ____ No
I am good at counting money
____ Yes ____ No
I know the value of a penny, nickel, dime and quarter.
____ All ____ None
__ Some

PARENT INVOLVEMENT

Dear Parents,

Your child is now studying money. We will be looking at the different coins and their value. Your child will need to know coins by sight, both heads and tails, plus the value attached to that coin. Example: a quarter is worth 25 cents. Students will also be learning to count a collection of money equal to $1.00.

If your child receives an allowance, you may want to let him count it. Or have him choose coins that will pay for ice cream or lunch money. When you go to the store, maybe you could assist your child in paying for something himself with his money. Handling real money is the best way for your child to learn about money.

At the conclusion of this unit, we will send an evaluation home. Please feel free to answer the questions and comment on what you feel your child learned during the unit on money.

Thank you for your support.

Sincerely,

COUNTING AND SPENDING MONEY/
PARENT RESPONSE

Name____

In what way have you heard about this unit from your child?

____ Homework____ Conversation____Projects

Other:__________________________

Has your child shown an interest in money?
____ Yes ____ No
Did your child show you how to count money?
____ Yes ____ No
How would you describe your child's attitude toward math before this year?
____ Positive ____ Neutral ____ Negative
How would you describe your child's attitude about math now?
____ Positive ____ Neutral ____ Negative

COMMENTS: I am interested in hearing any comments you would like to make, especially any recommendations for improving and strengthening this unit.

MAKING "CENTS" AT SNACKTIME

by Paula White

AGE LEVEL	Early Elementary
TYPE	Performance Task
FOCUS	Mathematics as problem-solving and communication.
Mathematics	
2.15	The student will identify pennnies, nickels, dimes, quarters and dollar bills.
2.16	The student will determine, by counting, the value of a collection of pennies, nickels, and dimes, whose total value is 100 cents or less.
2.19	The student, given a simple picture or bar graph, will determine the number represented in each row or column and compare the numbers.
2.20	The student will solve simple problems.

NCTM STANDARD 1: Mathematics as Problem Solving
The student will formulate problems from everyday experiences, develop and apply strategies to solve a wide variety of problems, verify and interpret results with respect to the original problem, and acquire confidence in using mathematics.

NCTM STANDARD 2: Mathematics as Communication
The student will relate physical materials, pictures, and diagrams to mathematical ideas, and reflect on and clarify their thinking about mathematical ideas and situations.

NCTM STANDARD 4: Mathematical Connections
The student will link conceptual and procedural knowledge and use mathematics in their daily lives.

NCTM STANDARD 6: Number Sense and Numeration
The student will construct number meanings through real world experiences and the use of physical materials, and interpret the multiple uses of numbers encountered in the real world.

ASSESSMENT PURPOSE

X Making instructional decisions
X Monitoring student progress in the classroom
__ Communicating and using summative evaluation
X Monitoring studetn progress externally
__ Validating student achievement
__ Evaluating programs
__ Addressing accountability

SETTING

Virginia L. Murray is a small school in western Albemarle county that has an inclusive philosophy. There are 250 students in the school, with an average of two classes per grade level. This project and assessement took place in a classroom of 24 children, six of whom are identified special education students. Generally, the teacher was the only adult in the room during the time when this activity occurred.

V.L. Murray offers a variety of choices for the children at snacktime, including a small juice or punch or milk for 30 cents or a large juice for 40 cents. The teacher is responsible for collecting the money, turning it in to the cafeteria and getting the appropriate purchases.

In this classroom, the teacher allowed the children to be completely responsible for this task, giving initial guidance, help and planning assistance. However, since January, this activity has been handled completely independently by the children and monitored by both the classroom teacher and the cafeteria manager, Granny Jane. The students take up the money, count it, and record and make buyers accountable for their choices, through a graph.

ADMINISTRATION

As children enter the room from the buses, there is a daily schedule of morning work that includes such things as going to the listening center, working on science logs, building with construction toys, working in the computer lab, and doing an art activity. One of the selections is also the "Morning Jobs" category, where children take turns being the "Custodian" (unstacking chairs and readying the room for the day), the "Secretary" (filling out the absentee and lunch count slip for the office), and also the "Cafeteria Manager" (taking up snack money, recording who gets what, and then paying for and getting the snacks).

Initially, each group of four children stay at a station only for a day, except for the "Morning Jobs" people, who are there for a week, to learn how to do the jobs. Thus, the teacher only has to monitor four students a week for the initial training time. During this time, the teacher checks on each child's ability to recognize coins, recall a standard price list, county money, give appropriate change and construct, read and interpret graphs by watching and observing them during their turn as "Cafeteria Manager."

Children do this job in pairs, initially to provide support for each other, and later, to provide a "checks and balances" system. The weekly system for learning the jobs is done until each group has cycled through the "Morning Jobs" category twice, then they join the rest of the groups changing daily as well. (With 24 children in six groups of four, this took approximately twelve weeks.)

Once the groups all start changing daily, the children are considered independent, and the teacher's role becomes that of observer or troubleshooter, with the paired students expected to inform and help one another, asking for help when necessary. The teacher is thus freed to observe children working with money in a real context, and assess skills being used in a real-life manner. Direct teaching or remediation can then take place during reglar math instruction, and students can be set up to be successful in a situation they will face regularly in their lives (that of making purchases, change, and adding coins.)

Materials

A tub used to carry snack drinks
A graph form like the one attached
A container (with a lid) for the money

LOOK-FORS

1. Student recognizes coins.
2. Student gives appropriate change.
3. Student counts money.
4. Student recalls a standard price list.
5. Student constructs, reads and interprets graphs

RUBRIC

Money Rubric

5. Student knows the values of all coins, totals all daily purchases (both individual and class) and gives appropriate change when necessary.
4. Student knows the value of all coins, gives appropriate change, and totals class pruchases by category. Student may attempt to total the class purchases across categories.
3. Student recognizes and assigns value to coins, gives change for individual purchases (perhaps with some errors) and attempts to total the class purchases, either by category or across categories.
2. Student attempts task, recognizes some coins, but cannot give change or total purchases.
1. Student is unable to attempt the task, due to lack of knowledge and understanding.

Communication Rubric

5. Student knows all prices of snack drinks, constructs a graph that allows others to be held accountable for their purchases, and interprets the graphed data to make the appropriate purcheses.
4. Student knows all prices of snack drinks, constructs a graph (that may not include all necessary categories), and interprets the graphed data to make appropriate purchases.
3. Student knows all prices of snack drinks, needs help to construct the graph, and interprets the graphed data to make the appropriate purchases, perhaps with minor errors.
2. Student understands the task, but is unable to carry out the task without assistance. Student uses teacher or other student-made graph and interprets it with assistance.
1. Student is unable to understand task or construct graph.

STUDENT SELF-EVALUATION

For the purposes of this task assessment, the learners wrote letters to the people who would be viewing the assessment. Possible other student self-evaluations could include writing letters of self-assessment to parents, describing or graphing self-observed changes in confidence or abilities with money, and keeping a log of the success of each turn at "Cafeteria Manager".

RECORD-KEEPING
See attached record-keeping sheet.

Student	Money	Communication	Money 2	Communication 2	Money 3	Communication 3

MEASUREMENT THROUGH COOKING

by Joette Crone

AGE LEVEL Early Elementary
TYPE Performance Task
FOCUS Mathematics as Measurement
Mathematics
2.13 use the appropriate measurement tools while making accurate measurement.

The idea of using cooking activities as assessment tasks came from a desire to give students a real world context in which to practice and demonstrate their measurement skills. It is important not only to have students learn measuring skills, but then also give them opportunities to apply their new knowledge in relevant and motivating ways. The design of this assessment centers on cooking tasks which already take place in many early childhood classrooms. All young children are eager to participate in adult activities such as cooking, and of course measuring is a very purposeful real-life skill which is critical to the success of every person. The combination of these two elements provides a excellent chance to observe and record a student's growth in an authentic context.

ASSESSMENT PURPOSE

_X_ Making instructional decisions
The observations gathered from this assessment activity could be used to adjust instruction and provide meaningful information for conferences and narrative reports.
_X_ Monitoring student progress in the classroom
The purpose of this assessment is to monitor and record the development of student's measurement skills within the real-life context of cooking.
___ Communicating and using summative evaluation
___ Monitoring student progress externally
___ Validating student progress externally
___ Evaluating programs
___ Addressing Accountability

SETTING

A second grade classroom at Paul H. Cale Elementary School piloted the assessment twice. There are 23 heterogeneously grouped students in this class.

ADMINISTRATION

For Teachers

The teacher selects a cooking project. The difficulty of the project is determined by the variety of measurement tools used and the recipe selected. Often students need exposure to group interaction skills and assigned roles for the project. For independence, students should have many prior opportunities to explore and learn about cooking and measuring. Before the cooking activity begins, the teacher clearly states the measurement expectations and any other skills being assessed.

As the students cook, the teacher observes them and make notes on their progress, paying close attention to the look-for's. Using these standards, the teacher scores according to how well the students demonstrate the look-for's. She records these scores and makes narrative notes on an observation sheet. (See attached pages.) After everyone has had an opportunity to cook, the students discuss their performance and experiences. See pilot information for specific examples of activities.

In order to build cooking and measurement knowledge, I begin with modeling and whole group activities and work toward independence. The students participate in a variety of hands-on experiences with non-standard and standard units of measurement including a measurement center with rice tubs and measuring tools, activities involving estimation and problem solving from various published math resources, and various cooking activities. The students also read cooking related literature and participate in activities, with access to a collections of cookbooks. Students observe the teacher reading and interpreting recipes during whole group cooking activities and write their own recipes and stories about cooking.

LOOK-FORS

The following assessment criteria and standards were adapted from the Defining Our Outcomes handbook. Narrative notes could also be written on the sheet.

Teacher Terms:

1. The student is able to correctly use measurement tools of various sizes.
2. The student selects measurement tools or methods which are suited to the task at hand.
3. The student shows effective techniques for using measurement tools.
4. The student checks for accuracy.
5. The student seems confident and comfortable making measurements.

Student Terms:

1. I use different sizes of measurement tools.
2. I choose measurement tools that work for what I am doing.
3. I use the tools in the right way.
4. I check my measurement to make sure that it is right.
5. I think that I am a good measurer.

(These student look-for's can be developed from student discussions and posted in the classroom for easy reference. They can also provide the framework for a student feedback form.)

SCORING

5 = Student succeeds in making exceptionally accurate measurements. Can guide others in their attempts to measure. Can adopt to complex measurement situations.

4 = Student uses appropriate measurement tool effectively. Checks measurement for accuracy. Measures independently.

3 = The student can make measurements and often selects the correct measurement tool but has difficulty with accuracy. Approaches the task with eagerness.

2 = The student has difficulty making correct measurements and has much difficulty in choosing the appropriate tool or lacks accuracy. Measures with hesitation.

1 = The student is unable to measure effectively. Shows or expresses uncertainty when faced with a measuring task.

RECORD-KEEPING

See attached form.

PILOT INFORMATION

Trail Mix

My students made personalized bags of trail mix for a field trip. Each student could choose their own combination of ingredients from a recipe list. There were specific measurement requirements for each ingredient. For example, students could have only one tablespoon of raisins. During this activity, I was observing their measurement skills and taking notes on their ability to use the recipe list. I soon discovered that the measurement observation sheet and the look-fors need to be close at hand. Cooking with children can be very chaotic, leaving the teacher with little time to ponder over each child's performance. Quick recording becomes essential. Even though there were only two or three students working at the cooking station at one time, it was still very taxing to make notes on everyone in a timely manner. Next time, I would only focus on one skill until I had gained more experience with recording.

Pizza

My class made English muffin pizzas for our Halloween party. Students worked one at a time, and measurement skills were the only focus. Students made pizza plans by cutting out a paper pizza circle and gluing paper ingredients to it. This was their recipe, and then they became the cooks who were responsible for making the appropriate measurements for each ingredient. The recording became much easier because of the narrowed focus and my increasing familiarity with recording. Several parents made positve comments about their children learning to measure through cooking at conference time. They had been informed of this goal through the class newsletter.

Longterm Plans

The cooking projects will become increasingly more difficult to continually challenge the students. Assessment records are kept in a math notebook which is designed to show the students' growth over time. (See attached page.) The assessment criteria and standards will also be used with linear measurement projects. This will provide a comprehensive picture of a student's ability to measure in many different kinds of situations.

MEASUREMENT OBSERVATION SHEET

Assessment	Notes	
Title: ____________ Name: ____________ Circle: Linear Volume Mass Type: Written Hands-on Project Other Group: Yes No		
Title: ____________ Name: ____________ Circle: Linear Volume Mass Type: Written Hands-on Project Other Group: Yes No		
Title: ____________ Name: ____________ Circle: Linear Volume Mass Type: Written Hands-on Project Other Group: Yes No		
Title: ____________ Name: ____________ Circle: Linear Volume Mass Type: Written Hands-on Project Other Group: Yes No		
Title: ____________ Name: ____________ Circle: Linear Volume Mass Type: Written Hands-on Project Other Group: Yes No		

MEASUREMENT AND GROUP WORK

by Donna Barber

AGE LEVEL Early Elementary
TYPE Performance Task
FOCUS Mathematics as Measurement

Language Arts
2.2 - Students will follow multi-step directions.
Mathematics
2.11 - Students will identify parts or regions that represent 1/2 and 1/3.
2.20 - Students will solve simple problems using words or pictures.
Science
2.1 - Students will share responsibilities and tasks and use materials in a safe manner.
2.3 - Students will select appropriate instruments to measure volume.

ASSESSMENT PURPOSE

_X_ Making instructional decisions
_X_ Monitoring student progress
_X_ Communicating and using summative evaluation
___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing accountability

SETTING

John Wayland Elementary School, located in Rockingham County between Bridgewater and Harrisonburg, has 630 students. There are 29 (K-5) classrooms and several resource, special education, and support staff classrooms at the school. The curriculum at John Wayland is driven by Virginia Standards of Learning, county curriculum guides, and input from teachers. The following approaches to instruction are supported and encouraged at John Wayland:

- A whole language literature based approach to Language Arts instruction,
- The writing process appropriate to grade level,
- Manipulative based math instruction in K-2 classrooms,
- Integration of subject areas when possible.

The assessment is used in a self-contained second grade classroom of approximately 21 heterogeneously grouped children. The children are seated at tables to facilitate group interaction. Frequent hands on experiences are provided to the children to support instruction in all areas. Prior to this assessment, the children have several opportunities to practice the stated objectives, using corn to practice measuring.

ADMINISTRATION

For Teachers

Management

1. Students work in groups of 4 or 5.
2. Each ingredient (not measured) is on the individual tables prior to the activity.
3. Each table has one bowl, one set of measuring cups, one spoon, and one tray.
4. Parent volunteers help manage the assessment activity.

Procedure

1. The students read the recipe and the look fors prior to the task and told that their job is to make the recipe.
2. Each child is assigned an item to measure.
3. Each group is to devise a way to mix the ingredients so everyone has a turn.
4. The children follow the recipe, measuring and mixing the ingredients to make the honey milk balls.
5. Parent volunteers help with management while the teacher records scores and takes notes. Half of the class is assessed each time.
6. The children place their finished product on a tray to be used for a math activity later in the day (when they will get to eat the honey milk balls).
7. Children are to find a fair way of dividing the balls equally among participants at their table. They may

either write or draw their answers based on their solutions.

8. After cleaning up, we discuss the task.

9. Students are given a self assessment to complete (attached).

Assessment of Activity

1. The activity could be video taped for teachers to assess both the children and the activity.

Extension

1. Children could repeat this process using different quantities or a different number of ingredients.
2. This activity could be used with older children who would be asked to double the quantities or increase the quantity by 1 1/2 times.

Materials

1. One written recipe chart for Honey Milk Balls
2. Ingredients for cooking
   honey
   cornflakes
   dry milk peanut butter
3. Cooking utensils for each table
   bowls wax
   paper
   spoons measuring cups
4. One tray for each table
5. One dishpan for each table

Recipe

1/3 cup honey

1/3 cup peanut butter

1 cup dry milk

1/2 cup cornflakes (placed on plate)

Mix honey and peanut butter. Add dry milk. Stir. Roll into an egg shape. Roll in cornflakes.

Variation: Add 1/2 cup raisins and roll in 1/2 cup Rice Krispies.

LOOK-FORS

1. Students will work with others
   * Share measuring tasks
   * Share responsibility
2. Students will measure ingredients
   * Select correct measuring tools
   * Measure accurately

3. Students will follow the recipe
   * Use the recipe chart
   * Produce Honey Milk Balls

SCORING

Recognizing that children's skills and abilities emerge gradually and that needing assistance to complete tasks is a natural step on the way to independent work, the following scoring scale will be used by the teacher to mark the scoring sheet.

3. Student does task alone
2. Student does with help
1. Student doesn't do

RECORD-KEEPING

Scoring Sheet will be kept in student portfolio and will be used to discuss student growth and progress toward objectives.

PARENT INVOLVEMENT

Parent Volunteers were used to help with the assessment project. Written communication about the assessment was given to parents before the assessment began. Parents were sent the enclosed questionaire after the assessment project to recieve feedback from parents.

ASSESSMENT SHEET

Name	Works With Others Shares Measuring Tasks Shares Responsibility	Measures Ingredients Selects Correct Tools Measures Accurately	Follows Recipe Uses Recipe Chart Produces Honey Milk Balls	Comments

3	**Does Alone**
2	**Does With Help**
1	**Doesn't Do**

PARENT RESPONSE SHEET

Honey Milk Balls

I am participating in a committee for Rockingham Co. that is looking at ways to make learning, teaching, and assessment more active. Making the honey milk balls was part of this committee work. Would you please take a few minutes and complete this questionnaire regarding that activity.

1. How did you as a parent feel about this activity?

____

____

2. How would you describe your child's feelings about this activity?

____

____

____

3. What did you feel your child learned from this experience?

____

____

Other Comments: ____

HONEY MILK BALLS

** Tell 3 things you learned about making milk balls.

1. ____

2. ____

3. ____

** How well did you measure?

very well o.k. needed help

** How well did you work with your group?

very well o.k. needed help

** How well did you follow the recipe?

very well o.k. needed help

BULLETIN BOARD--ERS

by Nancy Lam

AGE LEVEL	Early and Upper Elementary
TYPE	Performance Task
FOCUS	Mathematics as Measurement and Geometry
Mathematics	
2.12	Use a ruler to make simple linear measurements in centimeters and inches.
3.10	The student will measure length in centimeters and inches.
Science	
2.3	Choose the best tool to measure with.
3.3	Use basic metric units of measurement in classroom and real world situations.
Language Arts	
2.2	Follow multi-step oral and written directions.

In this assessment the child shows understanding of the attributes of perimeter and area. The students make and use estimates of measurement in an everyday situation and may use standard or nonstandard units of measurement.

ASSESSMENT PURPOSE

☒ Making instructional decisions
☐ Monitoring student progress in the classroom
☒ Communicating and using summative evaluation
☐ Monitoring student progress externally
☐ Validating student achievement
☐ Evaluating programs
☐ Addressing Accountability

SETTING

Port Republic Elementary is a small, rural elementary school in the south eastern part of Rockingham County. It currently has 193 students in grades K-5. There are 11 classroom teachers, a Chapter I reading teacher, LD resource teacher, and part time Physical Education and Music teachers. The curriculum at Port Republic Elementary is base on the Virginia SOL's and the curriculum guides of Rockingham County. Whole language instruction and integration of subject areas are used in classrooms. Teachers are encouraged to use hands on materials and manipulatives in lessons. Writing is emphasized throughout the curriculum. This assessment was used in a second grade classroom of 19 students. The class is a heterogeneous group, consisting of 2 LD children and 8 Chapter I children. The children are seated at tables in groups of three and four. The seating arrangement facilitates cooperative group activities.

ADMINISTRATION

For Teachers

This assessment culminates a unit on measurement, perimeter, and area. During the unit the children used a variety of hands on materials to explore area and perimeter. The children were introduced to and experienced both metric and English measurement units and tools and non standard units. This assessment may take two class periods to complete. Groups of children are asked to plan and construct a bulletin board. Each group is given a space to use. The groups are to decide the theme, color and amount of paper for the background, the boarder material and how much to use, how many pictures will fit, and how to arrange them. The children record their plans and then make their bulletin board. Upon completion the children compare their plans with the finished project.

Preparation

Divide the class into groups of 4 or 3 children. Put all of the materials out where the groups can choose what they want to use. Give each child a planning sheet. Ask each group to plan and make a bulletin board display for the classroom or the hall. Hand out the planning guides and discuss them with the children. Go over the do's of working in groups. " Do take turns. " Do listen to everyone's ideas. " Do your best. Assign each group a space to use. The groups are then to make decisions about what they want their bulletin board to be about. They need to discuss and decide on each item on the planning guide, taking measurements as necessary. After planning their bulletin board each group is to construct their bulletin board display. Upon completion the children compare their plans with the finished project and fill out an evaluation of their project.

Teacher's Role During the assessment the teacher observes the groups and monitors progress. At the completion of the assessment activity the teacher meets with each group as they compare their plan to their finished display and fill out their evaluations. The teacher assesses the children by observing and interacting with the students throughout the assessment and by using the attached observation sheet.

Materials:
Twelve inch square pieces of different colored construction paper, yarn, string, crepe paper, ribbon, rulers, yardsticks, meter sticks, magazine pictures, posters, pencils, crayons, markers, crayons, scissors, paste, thumbtacks, staplers

For Learners:
Student Look-fors
* We followed our plan.
* We measured carefully.
* We listened to each other.
* We took turns.

LOOK-FORS:
A. Selection of measurement tool or methods which are suited to the task at hand.
  1. Inclusion of all outer edges when measuring the perimeter.
  2. Counting squares to find the area.

B. Correctly uses measurement tools.
  1. Aligns the 0 mark on the tool with the end of the object being measured.
  2. Finds the measure to the nearest unit.

C. Work cooperatively in groups.
  1. Each person shares in the measuring task.
  2. Checking of each others work.

D. Make and follow a plan for the bulletin board.
  1. The selection of pictures fits the planned theme.
  2. The children considered the space requirements of each picture.
  3. The bulletin board is visually appealing.

RUBRIC
The children will be given the following ratings:
3 - does with the group
2 - does with teacher intervention
1 - doesn't do

RECORD-KEEPING
See attached

GROUP__________

DATE__________

Children's Names									
A. Selection of measurement tool or methods which are suited to the task at hand. 1. Inclusion of all outer edges when measuring the perimeter.									
2. Counting squares to find the area.									
B. Correctly uses measurement tools. 1. Aligns the 0 mark on the tool with the end of the object being measured.									
2. Finds the measure to the nearest unit.									
C. Work cooperatively in groups. 1. Each person shares in the measuring task.									
2. Checking of each others work.									
D. Make and follow a plan for the bulletin board. 1. The selection of pictures fits the planned theme.									
2. The children considered the space requirements of each picture.									
3. The bulletin board is visually appealing.									

Scale:
3 - does with the group
2 - does with teacher intervention
1 - doesn't do

Look-for C & D may be a group score.

I'm a Bulletin Board--er!

Stand back and look at your space. Then answer these questions about your work. Look back at your plan. Our bulletin board makes me feel good.

- We followed our plan.
- We measured carefully.
- We listened to each other.
- We took turns.

The part of our bulletin board that I like best is:

____

____

The part that I like the least is:

____

____

EVALUATING MEASUREMENT THROUGH ALTERNATIVE ASSESSMENT

by Lisa Colvin

AGE LEVEL	Early and Upper Elementary
TYPE	Performance Task
FOCUS	Mathematics as measurement

Reference to County Curriculum

Mathematics

4.6 The student will investigate and use measurement as means of problem solving.
Descriptive Statement: Actual measuring devices will be used to develop measuring skills. Emphasis will be placed on continuing to expand linear measurement, time and money. The concept of liquid volume will be explored.

5.6 The student will investigate and use measurement as a means of problem solving.
Descriptive Statement. Actual measuring devices will be used to develop measurement skills. Emphasis will be on linear measurement and liquid volume. The concept of weight/mass will be explored.

Science

4.3 The student will select he appropriate tool, take a measurement and report it using the appropriate unit.
Descriptive Statement: Emphasis is on using the proper tool to measure length, mass, volume,a nd temperature, and report it in the proper unit of measurement (for example, use meter to measure width of the room, not millimeters)

5.4 The student will measure objects using metric units and tools.
Descriptive Statement: Emphasis will be on further exploration of linear measurement and liquid volume. The concept of weight/mass will be explored.

ASSESSMENT PURPOSE

☒ Making instructional decisions
☒ Monitoring student progress in the classroom
☒ Communicating and using summative evaluation
☐ Monitoring student progress externally
☐ Validating student achievement
☐ Evaluating programs
☐ Addressing Accountability

SETTING

This assessment took place in fourth or fifth grade classroom. It is a summative assessment of measuring skills and applying them in real life situations. It also includes a formative assessment that allows the teacher and student to assess the development of the students oral communication skills. The information gained form the formative parts will be used to improve future use of oral communication skills.

The class consists of twenty-two children and one classroom teacher. The students are heterogenous and self-contained. The teacher will work with these students for two years.

The school is located in a rural area. We have a total of 240 students and twelve classroom teachers. Our school is always trying to improve. We are a very forward moving school with great support from our principal.

ADMINISTRATION

For Teachers

Cooperative group work/teacher observation

Students work in cooperative groups to practice using measurement tools. Tools for measuring volume, mass, and length are used. The teacher models the use of each tool before the groups begin to practice. The teacher gives each group written directions to guide their practice. Real life situations and materials are used in each activity . As the students practice the teacher walks around observing their use of the tools. As she sees students needing help she gives corrective feedback as well as giving positive feedback to those who show a good understanding.

Individual practice with teacher observation

Students will be given opportunities to practice using their measuring skills individually after working in groups. One sample activity is as follows:

> Using metric units of volume estimate the volume of four containers? Decide which containers could hold approximately 250 mL of left over peas from dinner. Check your answer using the appropriate to tools correctly.

Checklists

As the teacher walks around she will fill out the following checklist for each child. When the list is complete for individual student she will begin their summative evaluation of Outcome I. Three lists will be used. Each will have a different focus; mass, volume, and length.

For Learners
Assessment Tasks

I. The student will use measurement skills correctly and appropriately.

The students will be given a list of items to measure and a variety of measuring tools (for example, tape measures, rulers, meter sticks, measuring cups, measuring spoons, graduated cylinders, spring scales, balance scales, foot scales). The teacher will observe and take notes as the student measures each item. (Sample items form list: volume of tupperware container, mass of package to be mailed, length of shoestring.)

Measurement Unit Overview

We are beginning a unit on measurement. We will be working in cooperative groups and individually to master measurement tools and methods. When you and I feel that you are able to use measurement skills you will be given a list of item to measure and a variety of measuring tools. I will observe and take notes which I will use to evaluate your understanding. I will be looking for the following :

- Are you able to select appropriate tools and methods?
- Do you use tools correctly?
- Do you use correct units?
- Do you measure accurately?
- Are you able to convert?
- Are you confident and comfortable making measurements?

When you have answered this outcome you will be able to select appropriate tools, measure accurately, use good measurement technique, and be comfortable with a variety of measuring methods. When mastery of measurement skills is reached you will apply these skills to a real life situation and present it tot he class. Your presentation must:

- demonstrate how measurement is used in your chosen situation
- explain how measurement is used in your situation
- be organized
  maintains focus
  has beginning, middle, and end
  has appropriate materials for demonstration
- show good presentation skills
  clear, loud voice
  good body posture

Have fun and be creative!

LOOK-FORS

1. Selects correct tool to measure mass, volume, and length
2. Correctly uses tools
3. Uses the appropriate measurement units
4. Checks for accuracy: repeats the measurement, calibrates scale
5. Converts among units of measurement
6. Sseems confident and comfortable making measurements

II. The student will apply measurement skills to a real life situation and present it to the class.

The student will identify one use of measurement in a real life situation. He must present this to the class in the form of a demonstration. While preparing presentations student will work in cooperative response groups. As part of the demonstration the student must explain how he is using measurement.

LOOK-FORS

1. demonstrate the use of measurement skills in a real life situation
2. explain how measurement is used in a real life situation
3. present information in an organized fashion
   - maintains focus
   - has beginning, middle, and end
   - has appropriate materials for demonstration
4. shows enthusiasm by speaking in a clear, loud voice, and using good body posture

If student completes presentation early he/she will be a peer tutor for others working on their first outcome.

SCORING STANDARD

Score	Description
5	- went beyond look-fors
4	- met the standards; completed all look fors
3	- demonstrated look fors with slight error
2	- incomplete; demonstrated with significant error
1	- incomplete; not demonstrated

PARENT INVOLVEMENT
Measurement Unit Overview Letter to Parents

Dear Parents,

We will be studying measurement for the next three weeks. Throughout this unit your s=child will learn to use measurement skills correctly and appropriately. After this is mastered he/she will apply his measurement skills to a real life situation and present to the class in the form of a demonstration and explanation, of how measurement is used in his/her self chosen situation.

After three weeks of cooperative group practice and individual practice, students will have to demonstrate their skills by measuring items while I observe and make notes of their work. The notes will then be used to evaluate his/her performance. Instruction will continue until your child is able to select appropriate tools, measure accurately, use good measurement techniques, and be comfortable with a variety of measuring methods.

After mastery of measurement is reached students must choose a real life situation in which measurement is used. He/she must prepare an oral demonstration and explanation of this situation to present to the class. After three days of in class and home preparation student will present situation to the class. Each students presentation will be evaluated on organization and presentation, as well as on the actual demonstration and explanation. If at any time you would be interested in coming to class and helping with our activities please call or send a note. I would be glad to arrange a time for you to participate in our unit.

At home, question student about specific skills being learned and allow them to demonstrate their skills in real life situations. Continuous use will lead to a more complete understand of measurement.

Thank you for your continued help and support.

Parent Evaluation of Measurement Unit
Student Name ____________________
Dear Parents,

Thank you for your help and support during our measurement unit . Please answer the following questions which will be used to improve future use of this unit and
present understanding of you child's development.

1. How do you feel this unit benefitted your child?

2. Have you observed your child using measurement skills on his own? If so, please explain.

3. How could the unit be improved to better meet the needs of your child?

Thanks again for your help. I hope you see continued academic growth in your child.

Sincerely,

Name ____________________

Measurement Attitude Assessment

1. List the first five things that come to your mind when you hear the word measure.

____
____
____
____

2. What is measuring?

____
____

3. Circle the one you like the most. Cross out the one you most dislike.
Solving problems
Measuring
Drawing

4. Put a check under the appropriate column.

I feel frustrated when I measure.			
I have fun measuring.			
Measuring is a useful skill.			

5. The last time I measured was ____________________
____

6. Draw a picture of yourself measuring.
Use the back of the paper.

7. Put a check beside the items that complete the following sentence: I use measurement when I....

_____ tell time
_____ wrap a gift
_____ clean my room
_____ cook dinner
_____ buy new clothes
_____ check the weather
_____ sew
_____ play games

COMPLETE BEFORE AND AFTER UNIT.

Name ____________________

STUDENT SELF AND UNIT EVALUATION
Compare your two MEASUREMENT ATTITUDE ASSESSMENTS.

1. *What change do you see?*

2. *Why do you think these changes occurred?*

3. *How did this unit help you?*

4. *Explain a time that you recently used measurement outside of the classroom.*

5. *What in the unit was most helpful for you?*

6. *What do you feel could be done to make the unit better for you?*

Measurement Assessment

Look-fors:

1. *selects correct tool to measure mass, volume, and length*
2. *correctly uses tools*
3. *uses the appropriate measurement units*
4. *checks for accuracy; repeats the measurement, calibrates scale*
5. *converts among units of measurement*
6. *seems confident and comfortable making measurements*

Scoring Standards

Score	*Description*
5	*- met and went beyond look-fors*
**4*	*- met the standards; completed all look-fors*
3	*- demonstrated look-fors with slight error*
2	*- incomplete; demonstrated with significant error*
1	*- incomplete, not demonstrated*

** Corrective work will be done until mastery is reached.*

Student Self Evaluation

Student Name ______________________ *Date* ______________________

Score ________ *Reasoning* ______________________________

Teacher Scoring

Date ______________________ *Score* ______________________

Reasoning ______________________________

Parents Signature ______________________________

Date ______________________

Presentation

Look-Fors

1. *show the use of measurement skills in a real life situation*

2. *explain how measurement is used in a real life situation*

3. *present information in an organized fashion*
    - *maintains focus*

    - *has beginning, middle, and end*

    - *has appropriate materials for demonstration*

4. *show enthusiasm by speaking in a clear, loud voice, and using good body posture*

Scoring Standards

Score	*Description*
5	*- met and went beyond look-fors*
4	*- met the standards; completed all look fors*
3	*- demonstrated look fors with slight error*
2	*- incomplete; demonstrated with significant error*
1	*- incomplete; not demonstrated*

Student Self Evaluation

Student Name ______________________ *Date* ____________________

Score ______ *Reasoning* ______________________________

____

____

____

Teacher Scoring

Date ______________________ *Score* ____________________

Reasoning ______________________________________

____

____

____

____

Parents Signature ______________________________

Date ______________________

MEASUREMENT OBSERVATIONS

STUDENT	*LENGTH*	*MASS*	*VOLUME*	*EXPLAIN*

GEOMETRY

by Barbara McKee

AGE LEVEL Early Elementary
TYPE Performance Task
FOCUS Mathematics as geometry and spatial sense. Language Arts as creative process. Social Studies as individual development and identity.

Mathematics

3.16 The student will describe triangles, squares, and rectangles by naming the number of sides, the number of corners, and the number of square corners.

3.17 The student will identify open and closed figures. This includes finding: triangles, squares, and rectangles by naming the number of sides, the number of corners, and the number of square corners.

Language Arts

4.4 write a brief expository narrative

Social Studies

3.2 - listen to, observe, and follow instructions

The student is asked to demonstrate their ability to apply understanding of two dimensional shapes (circle, rectangles, squares, oval triangles.) and three dimensional shapes (cube, cone, pyramid, sphere, cylinder, rectangular prism) and to use perimeter, area, congruent figures, patterns, and symmetry to solve real problems.

ASSESSMENT PURPOSE

___ Making instructional decisions
_x_ Monitoring student progress in the classroom
___ Communicating and using summative evaluation
___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

SETTING

Stone Spring Elementary opened in the fall of 1993 to an estimated 470 students in K-5. The school is equipped with a modern media center, a CCC lab (computer program for Grades 1-5), special education classes, an Apple computer lab, and resource rooms for art and science. All students have PE for thirty minutes daily and music for thirty minutes twice a week. Stone Spring community consists of a wide range of socio-economic levels from government subsidized housing to the country club, with a largely caucasian population. Recent in-service workshops include cooperative learning, whole language, and community involvement. Parents are welcome in the school and a volunteer program has been started. Stone Spring and other city schools benefit from the proximity of James Madison University, Eastern Mennonite College, and Bridgewater College. These institutions provide practicum students, volunteer tutors, and student teachers. This classroom includes 27 heterogeneously grouped students, 1 black, 1 hispanic, and 25 caucasians.

Special needs children include 4 learning disabled, 2 Chapter I, and 1 speech. The students work together in cooperative groups and are seated in a square to enhance eye contact and discussion. Student participate actively in their learning. They help each other, teach each other, and share ideas with each other. Manipulatives and the overhead projector are used to enrich instruction. We take six field trips a year.

Background

This assessment is used at the end of the theme "You and Your Community." For six weeks, the students learn about their community, geometry in the community, map skills, and safety in our community. Students have many experiences using geometry. In language arts, students make story pyramids and then story cubes. During safety we identify the shapes of signs. In social studies we make grid maps of our neighborhoods, and use shapes in our map key. The students also built a miniature community using small boxes covered with paper, drawing congruent and similar figures on each to identify windows and doors. Students work in cooperative groups, sharing their community experiences and working together to build a background of common knowledge.

The class field trip to downtown allows them to observe firsthand details about the city. The field trip is followed by a brainstorming session of what was observed and ideas generated from the observations.

We used manipulatives in math. Straw and paper clips made great figures and angles. We used small boxes filled with peanuts to compare volume, and solid figures were handled and compared to environmental items. We used rulers to help measure perimeter, and toothpicks to make line segments, plane figures, and congruent shapes. Attribute pieces helped us form patterns, while counters were used to recognize area. Students also completed many activities and seatwork dealing with geometry. Our adopted math text is the newest edition of "Harcourt, Brace, Jovanovich."

A master checklist may be used during this unit to monitor skills mastered. (discussed in more detail under record-keeping), brainstorming activities, along with teacher directed discussions motivated the students to be interested in building a small city. My goal is to interrelate social studies, math, health, and literature. Every six weeks I pick a social studies theme around which to center the curricula.

ADMINISTRATION

For Teachers

Pass out the worksheet - the grid paper . Explain the look-fors and scoring scale. Place a "look-fors" chart on the wall. Read directions aloud for those who need it. For those who have difficulty writing, they may need to give their narrative as an oral explanation. Some may need to work together in a group or with a volunteer. Those who are physically challenged may give oral directions to a friend who could then do the construction or drawing for them.

Materials

18" x 24" paper
Math cubes (40 per child)
Notebook and pencil
Centimeter paper
Red crayon
Ruler

For Learners

Part I: Pretend you are a famous building designer. You have been hired by the city to design a new school. You were hired because you are good at planning, using geometry, and following directions. You have many decisions to make and must think of the best design for a school. You must follow the city's specifications. You have two days to complete your task. Do your best, the city is depending on you.

Part II: Draw a similar school on the blank paper or construct a school similar to your plan using math cubes.

Part III: Write a brief detailed description of your school using geometric term in your description. Explain how geometry helped you. Remember, you are the designer of this new school. Explain why you decided on this design.

LOOK-FORS

Part I

My design has
- at least 2 right angles.
- a roof with at least 2 acute angles.
- a planned pattern of rectangular windows.
- two congruent doors.
- a dark dot on each corner of one of the doors.
- red crayon on all outside edges of the roof.
- a triangle above the door with it's line of symmetry marked.
- The perimeter of the space used is stated

Part II

My drawing or model
- uses my plan as a guide
- is neat

Part III

My narrative
- relates to the outside world
- correctly uses geometric terms that describe the schools design
- states reasons for the school's design

SCORING

Grades: Geometry terms
O= 10-11 terms drawn correctly
S= 6-9 terms drawn correctly

N = 2-5 terms drawn correctly
F = 0-1 no drawing

Grades: Narrative
O = 1. Relates to outside experience
  2. Reasons stated
  3. Terms used
S = 1. Reasons stated
  2. Terms used
N = 1. Terms used
F = 1. No Narrative

Grades: Following Directions
O = Each section completed according to directions
S = Most sections completed according to directions
N = Some directions were followed
F = No directions were followed

PARENT INVOLVEMENT
See attached parent response sheet.

SCORING

You will be scored on your understanding of geometry terms, your narrative and your ability to follow directions.

Grades	Geometry Terms	Narrative	Following Directions
O	10-11 terms drawn correctly	1. relates to outside experience 2. Reasons stated 3. Terms used	Each section completed according to directions
S	6-9 terms drawn correctly	1. Reasons stated 2. Terms used	Most sections completed according to directions
N	2-5 terms drawn correctly	1. Terms used	Some directions were followed
F	0-1 No drawing	No Narrative	No directions were followed

Name ____

Date ____

Pretend you are a famous building designer. You have been hired by the city to build a new office building for the downtown area. You were hired because you are good at planning, using geometry, and following directions. You have many decisions to make and must think of the best design of ran office building. You must follow the city's specifications. You have two days to complete your task. Do your best, the city is depending on you.

Part I Materials: centimeter paper, red crayon, ruler

Task: Plan and design a building that

- has constructed with at least 2 right angles.
- has a roof with at least 2 acute angles.
- has a planned a pattern of rectangular windows.
- has two congruent doors.
- has a dark dot on each corner of one of the doors.
- has red crayon on all outside edges of the roof.
- has a triangle above the door with it's line of symmetry marked.
- The perimeter of the space used is ________________________

Part II Materials - 18" x 24" Paper and Pencil

Task: Draw a similar building on the blank drawing paper. Use your plan as your guide.

OR

Task: Materials - math cubes (40/child)
Use math cubes to construct a building similar to your plan.

Part III Materials - Paper and Pencil

Task: Write a brief description of your building, use details. Use geometric terms in your description. Explain how geometry helped you. Remember, you are the designer of this new city building. Why did you decide of this design?

SELF EVALUATION CHECKLIST Name ____________________

1. I designed a school building and met all the specifications.

finished none	finished some	finished all	finished all, very detailed

2. I wrote a narrative about being a builder.

wrote nothing	wrote a little	wrote enough	wrote a lot, added details

3. I constructed a model of my school.

no model	poor model	good model	excellent exact model

4. I used my time well.

did nothing	wasted time	worked most of the time	worked hard every minute

5. I learned about geometry.

learned nothing	learned a little	learned some	learned a lot from other sources

Things I like or did well ____

Thinks I did not like: ____

Parent Response Name ______________________________

In what ways have you heard about this unit from your child?

_______ Homework _______ Conversation

_______ Projects _______ Other

Has your child shown an interest in geometric shapes during this unit?

_______ Yes _______ No

Did your child show you how to draw 3-dimensional shapes?

_______ Yes _______ No

Has your child used any of the following terms: plane figure, congruent symmetry, angles,faces edges, corners, volume, perimeter or area?

_______ Yes _______ No

How would you describe your child's attitude toward math before this year?

_______ Positive_______ Neutral______ Negative

How would you describe our child's attitude about math now?
_______ Positive_____ Neutral_______ Negative
*The students should be able to identify objects in their environment that remind them of each of these
a cube
a triangle
a cylinder
a rectangle

* They should be able to draw and label a right angle, an acute angle and an obtuse angle.

* They should be able to draw a figure that is symmetric and draw it's line of symmetry.

→ Comments: (I am interested in hearing any comments you would like to make, especially any recommendations for improving and strengthening this unit.)

Name________________________________

Part I Geometry Checklist:

1. Right angles (main building)
2. Acute angles (roof)
3. Pattern (windows)
4. Rectangles (windows)
5. Congruent (doors)
6. Corner (dark dot doors)
7. Edges (roof red outside)
8. Triangle (above door)
9. Symmetry (line on triangle)
10. perimeter (number)
11. similar (drawing)

	Total Geometry Score

Part II Narrative:

1. Geometric terms used
2. Reason decision made on this design
3. Relates to outside experiences

	Total Narrative Score

Name ______________________ Date ______________________

Part III Following Directions

5 each section completed beyond expectations

4 each sections completed according to directions

3 most of the sections completed according to directions

2 some directions were followed

1 no directions were followed

	Total social studies score
	Total task score

Comments: Strengths: Weaknesses:

GRAPHING SKILLS
by Phyllis Gaskins

AGE LEVEL	Early and Upper Middle Elementary
TYPE	Performance Task
FOCUS	NCTM Standard #2 - Mathematics as Communication. In grades K-4 students should be able to relate physical materials, pictures, and diagrams to mathematical ideas. In grade 5 students should be able to use oral, written, pictorial, and graphical methods to communicate ideas.

Mathematics

K.14 Make an object graph using ten or fewer objects.

1.16 Identify row or column containing more or fewer objects or pictures.

2.19 Determine and compare numbers represented in picture or bar graph.

3.18 Read and construct simple bar or picture graphs.

4.21 Construct a simple bar or picture graph.

5.16 Name points as ordered pairs; associate ordered pairs with points in a coordinate plane.

Graphing is a skill which is related to "real life" in the following ways:

1. Graphs are used in books, newspapers, and magazines to convey information to the reader.

2. In business and industry workers may need to create and interpret graphic displays.

Graphing skills can be taught in the classroom during science and social studies in collecting and interpreting information.

ASSESSMENT PURPOSE

The intent of this assessment is to assess the ability of third grade students to create a picture or bar graph. This assessment is designed to be used at the beginning, middle, and end of the year so p progress can be monitored over time.

_X_ Making instructional decisions

Based on student performance instructional methods and materials may be selected to meet the needs of the student(s).

_X_ Monitoring student progress in the classroom

Since this assessment is intended for use at three times during the school year progress can be monitored over time. The results could be kept as part of the student portfolio.

_X_ Communicating and using summative evaluation

Results of the assessment are intended to be shared with student, parent and/or principal.

___ Monitoring student progress externally

_X_ Validating student achievement

If this assessment were used by all teachers student achievement might be validated.

_X_ Evaluating programs

If this assessment were adopted and used throughout a district data could be collected to assess strengths and weaknesses of this portfolio format as a means of assessing and adapting curriculum.

___ Addressing Accountability

SETTING

A rural school of approximately 250 students with two classes of each grade level (K-5).

This assessment was first used in a third grade classroom of 23 heterogeneously grouped students. Two students were receiving services from a learning disabilities specialist. Three students were receiving Chapter I supplemental reading instruction. Four students were receiving services from the "challenge" program for the academically gifted.

ADMINISTRATION

For Teachers

Having completed a unit of study on weather the students will have collected data concerning type and amount of precipitation and daily temperature highs and lows. This data may be collected by the students and kept in each student's learning log or may be entered on a class record chart for all to see and use depending on student ability level. (Variation: It may be more appropriate at the lower grade levels to chart how many sunny, rainy, cloudy, snowy, and or windy days in a month or two-week period.)

Students should have prior experience in reading and creating picture and bar graphs in a large/small group setting.

Students will be given a GRAPHING LOOK-FORS assignment-scoresheet which will be used to discuss the listed "look-fors" and scoring standards. This score-sheet will also be used as the teacher evaluation form with space for student and parent evaluations and/or comments.

Approximate time for explanation of the assignment-scoresheet and work time for each student to complete his/her graph is 30-60 minutes.

Since this activity is designed to be administered at three different times during the year assessments become part of each student's portfolio of work. Students will be assessed on the various graphing skills; especially, creating a picture graph, creating a bar graph and creating a line graph (See Graphing Skills Checklist). Other types of data may be collected in science and social studies classes and be used to teach and/or reassess the students' graphing skills.

Materials

1. Paper for creating the graph (may be graph paper or plain paper depending on student preference.)
2. Feltpens, crayons, scissors, colored paper, glue, etc.
3. Individual or classroom data chart(s) for students to use in creating the graphs.
4. GRAPHING LOOK-FORS assignment-scoresheet for each student

LOOK-FORS The student should select the type of graph which she/he decides is appropriate for the given information. It is important that the assessor clarify what the student is to do without assistance; the amount of assistance needed may then become an indicator of the student's ability to complete the task.

1. The student is able to select an appropriate graph (picture, bar, or line).
2. The student sets up the graph accurately using the necessary components (title, legend, axes).
3. The student transfers information to the graph correctly.
4. The student creates a graph which is neat and easy to read.
5. The student makes a written/oral statement summarizing the information shown on the graph.

NOTE: See GRAPHING LOOK-FORS for "kid-language: version of the "look-fors".

RUBRIC

4 = The student's work is beyond expectations by degree of complexity, detail and explanation.

*3 The student created a graph which is accurate and easy to read and included a summarizing oral/written statement.

2 = The student set up a graph and recorded information but the graph is incomplete in some way.

1 = The student attempted to make a graph but did not successfully complete any task.

* Indicates mastery level.

SCORING

4 = Excellent; 3 = Good; 2 = Okay;
1 = Needs Improvement;

Taking notes while students are working enables the assessor to make clarifying written narratives concerning student work habits and progress which are useful when conferencing with the student or parent concerning each student's performance.

RECORD-KEEPING

The graph or a photo of the graph and the GRAPHING LOOK-FORS assignment-scoresheet will be kept in the student's portfolio. Student work will become part of their showcase portfolios as skills are mastered. This portfolio of work can be passed to next year's teacher and/or returned to the student.

PARENT INVOLVEMENT

In my classroom a "Weekly Note" goes home to the parents each Friday explaining the plans for the upcoming week. At the beginning of a unit of study parents are invited to share a skill or interest related to the theme. For example a parent may come or arrange for a friend to come to the class to share his/her expertise with weather or graphs.

The completed graph and the GRAPHING LOOK-FORS assignment-scoresheet will also be sent home so that the parents may give oral and/or written feedback to their child or to me

GRAPHING LOOK-FORS

Student Evaluation

1. I used a ______________________________ graph.

2. I set up my graph correctly with a title -------------Yes No
legend--------------Yes No
axes -------------Yes No

3. I put the information on the graph correctly----------------------
yes almost no

4. My graph is neat and easy to read-------------Yes Sort of No

5. I have made a statement telling what the graph shows----Yes No

Teacher Evaluation

Circle

4 =	The student created a graph which is accurate, easy to read, and included a summarizing oral/written statement.
3 =	The student created a graph which is accurate and easy to read.
2 =	The student set up a graph and recorded information but the graph is incomplete in some way.
1 =	The student attempted to make a graph but did not successfully complete the task.

Teachers Comments:	Parents Comments:

Date ____________

GRAPHING SKILLS

Name

SKILL:																								
Makes an object graph using 0-10 objects.																								
Identify the row containing more or fewer pictures.																								
Identify the bar containing more or fewer objects.																								
Determine and compare numbers in a picture or bar graph.																								
Construct a simple picture graph.																								
Construct a simple bar graph.																								
Construct a simple line graph.																								
Interpret trends, patterns, or relationships shown on a graph.																								

- indicates skills has been assessed but not mastered

+ indicates mastery of this skill as defined by the rubric score of 3 or 4

adapted from Defining Our Outcomes

KIDS LIST

OF

GRAPHING LOOK-FORS

TITLE

KEY

NUMBER OF ......

CHOICES

LABELING

NEATNESS

CLASS RECORD
OF
GRAPHING SKILLS

RUBRIC

4 = The student created a graph which is accurate, easy to read and included a summarizing oral/written statement.
3 = The student created a graph which is accurate and easy to read.
2 = The student set up a graph and recorded information but the graph is incomplete in some way.
1 = The student attempted to make a graph but did not successfully complete the task.

Six week period _______________

Name	**Date**	**Date**	**Date**

APPLES FROM TREE TO TABLE

by Peggy Simpson

AGE LEVEL Early Elementary
TYPE Performance Task
FOCUS Social Studies as production, distribution, and consumption

Social Studies

2.7 Students will describe how people are dependent upon each other for goods and services. (Students will recognize a producer of goods.)

Science

2.5 The student will make inferences after observation of an object or event.

Mathematics

2.14 The student will compare the weight of two objects using a balance scale.

Language Arts

2.13 The student will share personal experiences and feelings in writing.

ASSESSMENT PURPOSE

_X_ Making instructional decisions

This assessment will show which areas of apple production children are uncertain about and which areas of instruction need to be adjusted.

_X_ Monitoring student progress in the classroom

This assessment can be used to determine how well individual students understand the concepts being taught.

_X_ Communicating and using summative evaluation

The checklist from this assessment can be used to report knowledge gained by individual students with and without assistance.

___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

SETTING

This assessment was used as part of an Apple Unit designed for a second grade class at Pleasant Valley Elementary School in Rockingham County. Although we are actually in the city limits of Harrisonburg, we are surrounded by a variety of farms and apple orchards. Our school has 480+ students in pre-school through fifth grade. My self-contained second grade class has 18 heterogeneously grouped students including two receiving ESL (Spanish) services and six in the Chapter I program. The students are seated at individual desks arranged in small groups which can be easily regrouped into many configurations.

ADMINISTRATION

For Teachers

During this unit, the students discussed how the area's geography and climate is ideal for growing apples. They discussed how the apple industry affects our local economy. At a local apple orchard they observed apples being grown and talked with workers as they picked, sorted and packed apples for sale. The students also went to a local grocery store to observe what happened to the apples once they left the orchard. They observed and talked with workers unloading, handling, stocking shelves and preparing foods with apples and their products. The role of each worker was discussed and charted. The students purchased apple products and ingredients to prepare apple recipes int the classroom. After sampling these, they graphed the results of a taste test.

Different types of apples were examined and compared. Other activities included weighing and measuring, cutting apples into fractions, counting seeds, apple stamping art, dehydrating apples, keeping a journal of apple related activities, reading a variety of fiction and non-fiction books about apples and compiling a class apple recipe book.

After completing these activities, a variety of flawed apples and products would be placed on a table at the back of the room. Each child would be called back, one at a time to examine the items. The student would be asked to describe the following about each item:

What might have happened to this item?

How might it have happened?
Who might have done it?
What could have been done differently?

The number of student responses along with comments would be recorded ont the assessment checklist.

Materials

- Assessment checklist (see attached)
- Defective apple products including an apple with an insect hole, an unpolished apple, a bag of unsorted (different colors) apples, an unlabeled can, a burnt apple pie, and a damaged can of applesauce

For Learners

The teacher will give the following instructions to the students before calling them back for the assessment:

"When you come back to the table, you will see six items. I want you to look at each item and decide what is wrong with it. I will ask you to tell me what might have happened to cause it, how it might have happened, who might have done it, and what could have been done differently. I want you to try to come up with two or three different thing that might have happened for each item. You will be given you own 'Look-For' paper to help you remember what I'm asking you to do."

LOOK-FORS:

1. I know what might have happened to each apple or product.
2. I know how it might have happened.
3. I know who might have done it.
4. I know what could have been done differently.
5. I told all the reasons I could think of.

RUBRIC

5 = The student accurately described with detail each defect and the relationship between the product, the worker, and what might have been done in 2 or 3 different ways for all items.

4 = The student accurately described with detail each defect and the relationship between the product, the worker and what might have been done in 2 or 3 different ways for at least 4 items.

3 = The student accurately described each defect and the relationship between the product, the worker and what might have been done in more than 1 way for at least 3 items.

2 = The student accurately described the defect and the relationship between the product, the worker and what might have happened for at least 4 items.

1 = The student was unable to describe the defects or could not make the relationships between the product, the worker, and what might have been done.

SCORING

Student responses would be examined to determine if there was a correct relationship between the damaged good and the worker's responsibility. Scores would be given based upon the number and complexity of the responses with and without additional prompting. Additional prompting might include asking the student for more than one reason or to give more details about the response. A * beside the response will indicate where prompting was used.

RECORD-KEEPING

Each child's number of correct responses and scores will be written on the assessment checklist. The checklist may be kept in a folder along with other assessments.

PARENT INVOLVEMENT

A letter was sent home at the beginning of the Apple Unit explaining what activities the children would be involved in. They were also informed about what I would be assessing the students on. The checklist may be used during parent conferences to show the child's understanding of the concepts. Parents were involved in cooking experiences, as field trip chaperons, and by sending in apple recipes. A parental evaluation form may also be sent home. It might include questions such as:

What did your child learn about apples? What did you observe about your child's learning? Strengths? Areas of concern? Are there any suggestions about this unit? Do you think these activities and assessment were important?

Name____________________________

Date____________________________

ASSESSMENT CHECKLIST

Record the **number** of correct responses given for each item with/without assistance. Space has been provided to record **children's responses** for each item. Put a * where assistance was needed.

Defect	What might have happened to this item?	How might it have happened?	Who might have done it?	What could have been done differently?
Apple with insect hole				
Unpolished apple				
Can with no label				

Bag of unsorted apples				
Burnt apple pie				
Dented can				

without assistance

* with assistance

Score __________

____

Name____________________________
Date____________________________

APPLES FROM TREE TO TABLE

LOOK FORS

____ I know what might have happened to each apple or product.

____ I know how it might have happened.

____ I know who might have done it.

____ I know what could have been done differently.

____ I told all the reasons I could think of (2 or 3 for each item).

EARTH CARE ASSESSMENT PROJECT

by Marie Graham

AGE LEVEL	Early to Upper Elementary
TYPE	Project
FOCUS	Social Studies as People, Places, Environment

ASSESSMENT PURPOSE

_X_ Making instructional decisions
_X_ Monitoring student progress in the classroom
_X_ Communicating and using summative evaluation
___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

SETTING

This assessment was used with a group of twenty-one heterogeneously grouped third graders. Included in the group are two challenge (gifted) students, three remedial reading students, and one student who has been identified learning disabled.

The third grade is one of 17 classes in a rural school of about 250 students grades kindergarten through five. There are two special classes - an autistic and an emotionally disturbed. Both of these classes are mainstreamed into the regular classrooms.

ADMINISTRATION

For Teachers

Following a unit on recycling, this assessment tool is used to monitor student's learning; to determine how well they have internalized the concepts of the importance of conservation in the classroom.

Parts of the assessment tool is also to be placed in student's portfolio to be used to communicate to parents the progress the student is making in the school setting.

Students collect their school garbage for a week. Garbage includes anything they normally throw away at school; milk cartons, notebook paper, paper towels, tissues. At the end of the week students weigh and record the weight of their trash. They determine how much trash all groups in the classroom made.

At the end of the unit on conservation, the students again collect their classroom garbage for a week. This time they are using recycling plans that they made for themselves during the study. They again weigh their garbage at the end of the week and students are assessed on how well they follow the guidelines of classroom conservation and whether they can identify, from a group of objects, those that are environmentally friendly.

Stations are set up around the classroom. Each station includes items form which students choose those that are recyclable, nonrecyclable but biodegradable, or items that show source reduction. As they move form one station to the next, each student records choices and reasons for their choices.

The students make, and are expected to use, recycling bins. They also decide on some source reduction practices and on some nonbiodegradables that should be avoided if possible.

During the last week of the unit students record some of their conservation practices in the classroom.

Materials

Stations

These stations are set up in different areas of the classroom. Each station contains three items that students rate according to how environmentally friendly the items are.

1. Source reduction stations

Students rate the items in the following stations according to how well they contribute to source reduction.

Station 1

A. plastic bottle B. glass bottle

C. paper bag

Station 2
A. plastic sandwich boxB. plastic sandwich bag
C. paper bag

Station 3
A. school notebook paper - writing on one half one side
B. school notebook paper - writing on all of one side
C. school notebook paper - writing on both sides

2. Recycling Stations

Students rate the items in the following stations according to how well the items recycle.

Station 4
A. glass juice bottleB. cardboard juice carton
C. frozen juice can

Station 5
A. newspapers B. magazines
C. paper towels

Station 6
A. metal cans B. plastic pots of food
C. frozen cardboard boxed food

3. Composting stations

Station 7
A. styrofoam B. balloon
C. newspaper

Station 8
A. banana peel B. aluminum foil
C. plastic shopping bag

Station 9
A. plastic toy B. a flower
C. cereal box

LOOK-FORS
1. I choose things that can be recycled.
2. I choose things that are biodegradable.
3. I choose things that show "source reduction".
4. I make choices that lead to source reduction.
5. I recycle in the classroom.

SCORING
See attached check sheet

RECORD-KEEPING
See attached

PARENT INVOLVEMENT
See attached parent evaluation

STUDENT RECORD SHEET

Students use this sheet to record choice that are made at each of the stations. The students will find three items at each station. They will choose the one that answers the question at that station. The question will be one of the following:

1. Which of the three items below are recyclable in our community?
2. Which of the three items below can not be recycled but is biodegradable in a landfill.
3. which of the three items below contribute to source reduction?

Item	A.	B.	C.	Explanation
Source Reduction				
Station 1				
Station 2				
Station 3				
Recycling				
Station 4				
Station 5				
Station 6				
Composting				
Station 7				
Station 8				
Station 9				

ASSESSMENT CHECK SHEET

Student	Identifies Items That Are Recyclable	Identifies Items That Show Source Reduction	Identifies Items That Are Biodegradable	Recycles In The Classroom	Follows Appropriate Source Reduction	TOTAL

Grading:

Outstanding	18-20 points
Satisfactory +	15-17 points
Satisfactory	12-14 points
Needs Improvement	9-11 points
Unsatisfactory	0-8 points

Scoring Standards for Stations:

4. Student rates the items and includes reasons for his choices.
3. Student rates the items independently.
2. Student rates the items with teacher assistance.
1. Student fails to properly rate any of the environmentally friendly items.

Scoring Standards for Personal Practice:

4. Recycles and follows source reduction practices all of the time.
3. Recycles and follows source reduction practices most of the time.
2. Recycles and follows source reduction practices part of the time.
1. Does not recycle or follow source reduction practice.

STUDENT FORM FOR PERSONAL PRACTICE

Use of plastic sandwich holder in place of disposable sandwich bags.
Explain.

Use of handkerchief rather than tissues.
Explain.

Use of both sides of notebook paper.
Explain.

Encouraged parents to use the cloth shopping bag that we made for them.
Explain.

Use of one-foot paper toweling for drying hands.
Explain.

Use of scrap box for left over art supplies.
Explain.

Other.

SELF EVALUATION

Students will do a self-evaluation of the project by answering the following questions:

1. What are the three most important things you learned from this unit?
2. How successful do you think the activities were in helping you and your group see the importance of recycling?
3. How have you and your group's habits changed during this study?
4. What kinds of things can you do to encourage others to recycle also?
5. Can you think of other recycling projects that you would like to do on your own?

PARENT EVALUATION

Would you please respond to the following questions pertaining to the recycling activities that we have been doing in our classroom for the past two weeks?

1. Has your child discussed our recycling unit with you?______________________________
____

   If so in what way? ____
____

2. How would you describe your child's attitude toward this unit?
____
____

3. Have any of your child's recycling habits changed since this unit began?__________How have they changed?____
____

4. Have the family's recycling habits changed?_________________________If so how?_____
____
____

5. I would like to have any other comments that you would like to make about the unit - any suggestions for improving the unit or any changes that you think should be made.

POWHATAN INDIAN AUTOBIOGRAPHY AND ARTIFACT

by Betsy Blanks

AGE LEVEL	Upper Elementary
TYPE	Project
FOCUS	Social Studies as people, places and enviornments

Science

4.2 Observe an object or event and make several inferences regarding the identity of the object or possible reasons for the event.
4.5 Use collected data to make inferences or predictions.
4.16 Know that plants and animals of the same species are alike in major ways but vary enough to be individuals.

Language Arts

4.1 Participate effectively in informal classroom discussions.
4.2 Demonstrate effective listening skills.
4.7 Review and evaluate new concepts and ideas obtained from texts and apply this information in other situations.
4.10 Use the writing process to develop paragraphs.
4.11 Revise writing to form compound sentences when appropriate.
4.12 Edit and proofread written work.
4.13 Vary written and oral communications according to purpose and audience.

Social Studies

4.11 Describe the culture and contributions of Native Americans and their contributions to European settlers.

ASSESSMENT PURPOSE

___ Making instructional decisions

_X_ Monitoring student progress in the classroom

Teachers can use this assessment to monitor students' progress in communications skills. The teacher uses the data from this assessment to determine if a student understands and appreciates differing cultures. Data may also be used to determine the growth in students ability to communicate where the narrative may be placed in student's writing portfolio.

_X_ Communicating and using summative evaluation

The assessment may also be used as a culminating activity following any subject area where the student is asked to switch places with objects, characters, people, etc.

___ Monitoring student progress externally

___ Validating student achievement

___ Evaluating programs

___ Addressing Accountability

SETTING

This assessment was used in a fourth grade classroom of 21 heterogeneously grouped students. One student spoke English as a second language. Three students receive learning disability services from a resource teacher. Eight students are enrolled in the school's Chapter I reading program. The students are assisted for a total of two hours each day from the resource teacher in the areas of Math and Reading. Central Elementary School is a 3-5 school with an enrollment of approximately 575 students. The school is located in Palmyra, Virginia.

ADMINISTRATION

For Teachers

Using picture analysis, the students analyzed the life of the Powhatan Indians. The students observed what was in the pictures, drew hypothesis, and came to a conclusion as to how the Powhatan Indians lived. We held discussions about Powhatan Indian life, and viewed videos produced by the Jamestown - Yorktown Foundation. Approximate teaching time for this series of lessons were 1 - 2 weeks for 30 -45 minutes each day.

At the conclusion of instruction, students wrote a 1 -2 page autobiography, produced an audio tape a narrative, or a video tape of themselves as a Powhatan Indian boy or girl. They were to start with themselves at their present age and continued their tale to adulthood. Along with their autobiography, they made an artifact they would have used as a Powhatan boy or girl. The students wrote a brief description of the artifact and its uses. Students had a week to complete this assignment.

Materials

* Pictures of the Powhatan Indians
* Transparencies made of the Powhatan Indian pictures
* Hand-outs on how to make Indian pottery, masks, instruments, etc.
* Hand-out listing the look-fors for the assignment
* Overhead projector
* Video projector
* Video: Three Ships, Three Stories

For Learners

LOOK-FORS

Autobiography

___ an autobiography telling of their life as a Powhatan Indian beginning from their childgood and ending with their adult life.

___ explain the duties and responsibilities you had in the Powhatan tribe and explain how you learned the skills needed to do you duties.

___ tell of the language spoken by the Powhatan Indians.

___ tell of the food you ate and the clothes you wore and how yhou got your food and made your clothes.

___ tell of the type of shelter you lived in and what it was made of.

___ an Indian name for yourself and for any other person you mention in your autobiography.

___ any other interesting information.

Artifact

___ is an artifact that you would have used being a boy or a girl.

___ is an artifact of the Eastern Woodland Indians.

___ handiwork seems to have been mainly done by the student.

Artifact description

___ the name of the artifact.

___ tell how the Powhatan Indians would have made it.

___ tell how the artifact would have been used.

RUBRIC AND SCORING

AUTOBIOGRAPHY SCORING RUBRIC

4 = Student met all criteria in the look-fors in all three sections of the assignment.
3 = Student meets all except 1-2 items of the criteria written in the look-fors.
2 = Student does not address 3-4 items of the criteria written in the look-fors.
1 = Student completed the assignment, but did not address the criteria in the look-fors.

ARTIFACT SCORING RUBRIC

4 = Student met all criteria in the look-fors.
3 = Student met all criteria except for one item of the criteria written in the look-fors.
2 = Student met only one item of the criteria written in the look-fors.
1 = Student's artifact is not gender appropriate or appropriate for the Powhatan tribe.

ARTIFACT DESCRIPTION SCORING RUBRIC

4 = Student met all criteria in the look-fors.
3 = Student met all criteria except for one item of the criteria written in the look-fors.
2 = Student met only one item of the criteria written in the look-fors.
1 = Student gives false information in all of the criteria written in the look-fors.

RECORD-KEEPING

See attached

Name______________________________

Date______________________

POWHATAN INDIAN AUTOBIOGRAPHY AND ARTIFACT CHECK

Autobiography

___ autobiography is written beginning as a child and ending as an adult.
___ shows use of imagination.
___ Indian names were used when speaking of themselves or others.
___ describes their duties and responsibilities as a boy or a girl.
___ explains how they learned their skills to do the duties and perform their responsibilities to the tribe.
___ mentions the Algonquian language as their spoken language.
___ tells what kind of food their tribe ate.
___ explains how the tribe got their food.
___ tells what their clothing is made of.
___ explains how their clothing was made.
___ describes the kind of house their family lived in.
___ explains how the house was built.
___ additional information.

Artifact

___ is an artifact that you would have used if you were a Powhatan Indian.
___ student made.
___ would have been used by the Powhatan Indians.

Artifact Description

___ name of the artifact.
___ how the Powhatan Indians would have made the artifact.
___ explanation of how the artifact was used.

TIDEWATER REGION AND CRITICAL THINKING SKILLS

by Betsy Blanks

AGE LEVEL	Upper Elementary
TYPE	Open Ended question
FOCUS	Social Studies as people, places and Enviornments

Social Studies

4.2 Students will locate and identify Virginia, its bordering states, and its major land and water features.

4.6 Students will identify and locate Virginia's natural resources, major crops, products, and industries and determine their role in the agricultural and industrial growth of the state.

Language Arts

4.1 Students will participate effectively in informal classroom discussion.

4.13 Students will vary written and oral communication according to audience.

ASSESSMENT PURPOSE

___ Making instructional decisions
X Monitoring student progress in the classroom
X Communicating and using summative evaluation
___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

SETTING

Central Elementary School is located in Fluvanna County, a rural community east of Charlottesville, Virginia. The school enrolls approximately 575 - 600 students housed in 25 regular classrooms. The school employs teacher's aides for the severe and profound handicapped classroom and for the library. Central also has a full-time guidance counselor, and part-time speech therapist, occupational therapist, nurse, art teacher, and psychologist. Parent volunteers and Project YES students from the high school assist in the classroom. In the 1993-94 school year teachers are involved in learning a new math series, beginning a foreign language program, and taking part in a Science/Social Studies Challenge program. Young Authors and TOPS math are also a part of a teacher's weekly schedule.

ADMINISTRATION

For Teachers

This assessment takes place at the end of a unit on Virginia's Tidewater region. During the course of the unit, students have researched and presented information relating to the agricultural and industrial growth in this region. After becoming familiar with Virginia's Tidewater region, students brought in newspaper articles from the area. Students and the teacher engaged in discussions of the news and its effect on people who live in the region. This year's current events included: the demise of oysters and other seafood in the Chesapeake Bay and Virginia's major rivers; the effects of taxes and inflation; military cutbacks; the summer's drought; and the possible threat of the pinebark beetle infiltrating our pine tree forests.

During class discussions, the teacher listed the topic (example: drought) on chart paper. Students responded to the topic by listing its possible effects. At the end of the week, the students were given a study guide, including ideas and topics to be familiar with and a sample study question.

This assessment is an open-ended question. Before beginning, the teacher reads the question aloud and clarifies by answering questions. The teacher encouraged students to write out and/or draw pictures and label their responses.

TIDEWATER REGION STUDY PROMPTS

1. The student thinks about how each topic of study: geography, resources, agriculture, points of interest, and business and industry allow people to have jobs in this region of Virginia.
2. The student thinks about how each topic relates to the other.
3. The student thinks about how current events may influence life in the Tidewater.

TIDEWATER STUDY QUESTIONS

1. How will pollution in the Chesapeake Bay, this past summer's drought, the threat of the pinebark beetle, the decrease in our military forces and the increase in gas prices effect the people who live and work in Virginia's Tidewater region?
2. Imagine that your family owns and operates a local restaurant on a popular river in Virginia's Tidewater region. Much of the food that is served in your family's restaurant is locally grown, raised and caught. How will the recent turn of events in the area influence your family's restaurant business and your family's way of life?

TIDEWATER REGION PROMPT QUESTION

1. Your family owns and operates a grocery store in Virginia's Tidewater region. Your store specializes in locally grown fruits and vegetables, meats, and seafood. Your store is located near a military base. Three miles to your east is a river which enters the Chesapeake Bay. Many fisherman and their families live along this river. Five miles to your west are several farms who send you a part of their produce. Your family's grocery store also services many tourists that visit the area during the year. How are the recent turn of events in your area going to influence your family's business and your family?

Materials

- newspaper articles
- map of Virginia
- chart paper
- markers

LOOK-FORS

--- I told about one or more current event.

--- I told what caused the current event to happen.

--- I tied in how the current event impacts our natural resources, business, and industry.

--- I told how current events impacted my family business.

--- I told how current events impacted the way my family lives.

SCORING

5--- All look-fors are meet and exceeded expectations.

4--- Student covers all items covered in the look-fors.

3--- Student covered only 4 of the 5 items mentioned in the look-fors.

2--- Student covered only 2-3 items mentioned in the look-fors.

1--- Student demonstrated no comprehension.

Student Learning Objective

STUDENT NAMES	Relates resources, business and industry	Causes of current Event	Discuss Current	Relates family business	Relates family life

JASON V PROJECT

by Jane Daniel

AGE LEVEL	Upper Elementary
TYPE	Project
FOCUS	Social Studies as people places and environments

ASSESSMENT PURPOSE
___ Making instructional decisions
___ Monitoring student progress in the classroom
_X_ Communicating and using summative evaluation
___ Monitoring student progress externally
___ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

ADMINISTRATION

For Teachers

After studying JASON V Project, reading related materials and watching various videos about tropical rain forests and barrier reefs the following assignment is given:

The Belizian Board of Tourism has hired you to design and produce a tri-fold brochure on the Rain Forest or the Barrier Reef at South Water Caye to attract more visitors to the area. You will use your knowledge of a tropical rain forest or a coral reef and its inhabitants to design Belize's brochure.

The brochure must be in color on a tri-folded sheet of 11" x 17" paper. It should include pictures of the area and/or plants, insects, animals or other organisms found in the rain forest area or the Barrier Reef (hand drawn, cut from maps, computer generated, etc.). There must be a caption written for each picture and a paragraph to entice viewers.

Quotes from videotapes, class discussion or research materials should be included.

You will make an oral presentation in addition to preparing your brochure.

Materials
11" x 17" paper
markers, crayons, pencils, etc. for construction
reference materials
videos- shown in class (or check out) on Belize coral barrier reefs and rain forests.

RUBRIC
FOR AN ORAL PRESENTATION

S: The presentation is eloquent. The speaker shows a flair for communicating with the audience. Humor and creativity are clearly present. The speaker seems confident and at ease.

T: The presenter speaks in a clear voice which can be heard by all. The speaker shows interest and enthusiasm. The rate of speech is appropriate. The speaker makes eye contact with everyone in the class. The speaker has no nervous habits which distract the listeners. The speaker is appropriately dressed and has excellent grooming and posture. Body movements add to the presentation. The presentation is organized with a beginning, a body of information, and a conclusion. There is a strong organizing theme to the presentation. There are clear main ideas with transitions between them. The details and examples used make the main ideas meaningful to the audience. Information is complete and accurate. It is clear that the student understands the core curriculum related to this project. Visual aids are used to make the presentation more interesting and meaningful. The visual aids are well done and can be seen by everyone in the class. The speaker allows time for the audience to think. The speaker involves the audience in some active way in the presentation. The presentation is the appropriate length.

U: The presentation is generally as good as one receiving a rating of T. There are one or two elements of the presentation which are less polished.

V: The presentation is generally similar to one receiving a rating of W, but there are one or two elements which are relatively well done.

W: The presenter is difficult to hear. The rate of speaking is too fast or too slow. The speaker does not show much interest and/or enthusiasm in the topic. It may sound like the speaker is reading the presentation. Eye contact is made with only some of the audience. The speaker may have nervous habits which distract from the presentation. The presentation itself shows little organization. The presentation rambles or it may seem like a list of facts. Details and examples are lacking or not well chosen for the topic and audience. Some information may be incomplete or inaccurate. It is not clear that the student understands the core curriculum related to this project. Visual aids are not well done and can not be seen by everyone in the class. The speaker does not involve the audience actively in the presentation. The presentation is not of the appropriate length.

X. The presentation is very poorly done.

RUBRIC FOR A BOOKLET OR PAMPHLET

S: This work goes beyond the rating of T. It is especially eloquent.

T: Overall, this work is excellent. It accomplishes its purpose and communicates well with the intended audience. There is a clear, focused theme for each of its components. The supporting details enhance the quality of the main ideas and they are woven into the work and do not seem "stuck on" of list-like. Accurate and appropriate information from a variety of sources is used in the proper quantity and in the proper locations. It is clear that the student understands the core curriculum related to this project. The sources are properly referenced. The author's own thinking is clearly evident. Diagrams, pictures, and other graphics are of high technical quality, making the text more clear and interesting. The proper format is used throughout. There are very few, if any, mechanical errors, none of which interfere with the meaning. The work is very neat and presentable.

U: This work is generally as good as that receiving a rating of T, but it is uneven with some relatively less-developed areas.

V: This work is generally similar to that receiving a rating of W, but it has one or two areas which are relatively better developed.

W: This work is weak. It does not accomplish its purpose well nor does it communicate effectively with the intended audience. The theme for the entire piece is not clear. The components do not support the theme well. The entire piece is not well organized. the components seem "stuck on" or list-like. Supporting details are lacking and/or inaccurate. It is not clear that the student understands the core curriculum related to this project. Sources are not well referenced. The authors own thinking is not evident. Diagrams, pictures, or other graphics are of poor technical quality and do not add much clarity or interest. The proper format is not used. The work contains errors which interfere with the meaning. The work is not neat and presentable.

X: This work is extremely weak in most or all areas.

SCORING

Students present to the class for peer and teacher assessment using the attached checklists. A total point number is agreed to the project. Not all of the checklist items are used each time.

A SAMPLE CLASSROOM ASSESSMENT LIST FOR AN ORAL PRESENTATION

ELEMENT	ASSESSMENT POINTS Possible	ASSESSMENT POINTS Earned
1. The speaker can be heard by everyone in the audience		
2. The speaker shows interest and enthusiasm.		
3. The rate of speaking is appropriate.		
4. The speaker makes eye contact with individuals throughout the audience.		
5. Body movements add to the presentation.		
6. The speaker is dressed appropriately, has excellent grooming, and excellent posture.		
7. The presentation is organized with a beginning, body of information, and conclusion.		
8. There is a clear focus to the presentation and the focus is not lost.		
9. The main ideas support the focus and there are clear transitions between main ideas.		
10. Appropriate support and elaboration are given to the main ideas.		
11. It is clear that the speaker knows his/her subject.		
12. Visual aids are well done, can be seen by all, and add to the presentation.		
13. The speaker allows time for the audience to think.		
14. The speaker actively involves his/her audience.		
15. The presentation is the appropriate length.		
16. The presentation communicates effectively with the intended audience.		
17. The presentation is creative and interesting.		
Total		

SAMPLE CLASSROOM ASSESSMENT LIST FOR A BOOKLET OR PAMPHLET

ELEMENT	ASSESSMENT POINTS Possible	ASSESSMENT POINTS Earned
1. There is a clear theme throughout the booklet or pamphlet.		
2. Chapters or sections are organized to support the theme.		
3. Chapters or sections have clear main ideas.		
4. Main ideas are supported with appropriate information.		
5. It is clear that the student thoroughly understand the core concepts relevant to this assignment.		
6. The student's own thinking is clearly evident.		
7. Information sources are properly referenced.		
8. Diagrams, pictures, and other graphics are of high technical quality and add to the over-all effectiveness of the booklet or pamphlet.		
9. The proper format is followed.		
10. Writing mechanics are of high quality.		
11. The work is very neat and presentable.		
12. The work communicates well with the intended audience.		
13. The work is creative and interesting.		
Total		

COOPERATIVE LEARNING GROUPS

by Joan Hutchens

AGE LEVEL	Early and Upper Elementary
TYPE	Checklist
FOCUS	Social Studies as social, individual development,

Social Studies

2.1 Help make classroom rules.

2.2 Tell how and why rules protect rights and property.

Science

2.1 Share responsibilities and tasks, and use materials in a safe manner.

Language Arts

2.3 Communicate ideas, concepts, and feelings through creative dramatics.

Art

2.4 Work cooperatively in art group activities.

Physical education

2.7 Discover various ways to move and object with a partner in groups of three for four.

2.24 Work without teacher assistance in a small group.

Use of cooperative learning groups within the class in order to :

1. *facilitate classroom organization.*
2. *behavior control in the hands of the students (use of peer control).*
3. *develop effective communication skills.*
4. *develop appropriate and effective cooperative skills.*
5. *facilitate effective learning of content in the classroom.*

ASSESSMENT PURPOSE

___ Making instructional decisions
_X_ Monitoring student progress in the classroom
___ Communicating and using summative evaluation
___ Monitoring student progress externally
_X_ Validating student achievement
___ Evaluating programs
___ Addressing Accountability

SETTING

Our school is a rural elementary school for grades K - 5. There are approximately 700 students. The school has six grade level teams who plan and teach together. However, each teacher is responsible for one class of approximately 22 students. The teams consist of five teachers, one instructional aide, and, in K-2, a reading specialist. We have a principal and an assistant principal. The school was changed from *open space* to closed classrooms in the past three years. There are other support personnel - music, PE, special education, librarian, challenge teacher (gifted), and guidance. The school has an active PTA, an organized parent volunteer program, and a pilot four year-old program and a preschool class for children with special needs. This is a class of twenty-one second grade students, including eight identified Chapter I reading students, one identified as learning disabled, and one identified as developmentally delayed. One child also receives speech therapy. The class functions as a closed classroom with one teacher. The teacher is pursuing a masters degree in reading from JMU and is implementing Language Arts assessment, whole language methods, holistic teaching, and developmental learning. Teaching includes the use of integrated subject-content material, trade books, hands-on techniques, and developmental learning strategies. However, what has worked for the teacher and the children over the past twenty-three years of teaching is also respected.

ADMINISTRATION

For Teachers:

The class is divided into five groups with four members in each group (the self-contained LD child is not a member of the groups since the child is not in the classroom except for roll call). The groups are formed by the teacher after observing personalities and academic achievement. Each group is made of a heterogeneous set of students - at least on *high achiever*, one *average*, and no more than two slower or *underachievers*. Groups are changed every six week period. It may be a special experience to allow the children to form their own groupings later in the year and/or the teacher form groupings based on a given sociogram.

Individual responsibilities are explained and posted:

• Go-getter	gets materials, books, supplies as needed by the group.
• Librarian	keeps records of work completed by individuals as well as the group.
• Record Keeper	checks off homework returned, notes returned, etc.
• Clean-up Manager	keeps the group area clean and makes sure supplies are kept in order

The groupings are explained, the responsibilities are assigned (posted in a class chart), and the look fors are explained and posted for the class in *child friendly* language. The children are encouraged to help determine the look fors in order to feel real ownership in the process. Several small academic tasks are given to the groups so that the teacher can observe if the members understand their individual role in the group as well as the function of the group before a formal assessment is undertaken.

Sample Academic Activities Involving Groups

Mathematics

Concepts- Family problems in basic addition and subtraction for 0-10. After the concept of family problems is demonstrated in a lesson, each group is given a numeral and is asked to discover all the number sentences one may find using the numeral. Each group is also given the number of unifix cubes equal to the given numeral to help them discover the family of number sentences possible for the given numeral.

Example- Numeral given 7

Group decides how to use the unifix cubes to find the combinations for seven.

$6+1=7$ $5+2=7$
$1+6=7$ $2+5=7$
$7-6=1$ $7-2=5$
$7-1=6$ $7-5=2$ etc.

Group decides how to represent and report their discoveries to the class.

Example - drawings of the number sentences by using the colors of the unifix cubes in the combination with number problem written beside the drawing.

Other activities one may use with the children (I have used these in a group setting atmosphere):

1. Learning Labs - activities prepared by the teacher in any academic area for the groups to work in together as the teacher is working with children on special needs or in reading groups. These labs may include such things as the use of the computer to practice a skill through the use of a program disk, folder games prepared in subject areas, art projects, or recorded stories - the group may record themselves reading a story sample, etc.
2. Math - assigning each group a certain sum and asking the group to come up with as many number sentences for the given sum and displaying the number sentences on a chart for the given sum and displaying the number sentences on a chart for the class.
3. Math - using a pictograph to report information the group is asked to find.
4. Art - giving the groups a supply of art materials and allowing the groups to produce something from them to present to the class.
5. Science - giving each group a certain thing to collect and to report on to the rest of the class (example: a collection of insects, rocks, trees, leaves, flowers).

Materials

Look-fors Chart
Job Chart
Check List (Class Record)
Child's Self Assessment Sheets

LOOK-FORS

Individual

1. The child participates in planning by identifying group tasks, accepts responsibility and locates resources.
2. The child facilitates group work by helping others when needed, sharing materials,

disagreement with group is positive and by not interfering inappropriately.

3. The child accomplishes his or her own task by working at the task, seeks help when needed, completes task on time, produces an appropriate product, and contributes to the total group assignment.

Total Group

1. The group plans by identifying it's task.
2. The group demonstrates sharing, positive resolving of disagreements, and helpful attitude to the group task.
3. The group completes the task on time, produces an appropriate product, and is able to summarize and report results of product to the class.

Child Friendly Look-fors

The following is posted in the classroom on a chart.

Working Together

The group will......
1 Get along
2 Share
3 Be helpful
4 Finish on time
I will...............
1 Get along
2 Share
3 Be helpful
4 Do my part

SCORING

4- Beyond Expectation
The group and/or individual student in the group met all skills of group participation beyond expectation.

3- Meets Expectation
The group and/or individual student in the group met the skills of group participation.

2- Almost There
The group and/or individual student in the group mastered with some minor problem the skills of group participation.

1- Expectation Not Met
The group and/or individual student was unable to meet the criteria of group participation

RECORD-KEEPING

Check list: Children are observed on at least two occasions during the year and scored according to the Scoring Rubric on Skills included on the group assessment sheet.

PARENT INVOLVEMENT

CLASS OF RECORD GROUP ASSESSMENT

Student Names																
Participates in Planning																
Identifies group tasks																
Occasion 1																
Occasion 2																
Assigns accepts responsibility																
Occasion 1																
Occasion 2																
Locates resource																
Occasion 1																
Occasion 2																
Facilitates Group Work																
Helps others when needed																
Occasion 1																
Occasion 2																
Shares material																
Occasion 1																
Occasion 2																
Doesn't interfere with others																
Occasion 1																
Occasion 2																
Accomplishes Own Task																
Works on assigned task																
Occasion 1																
Occasion 2																
Seeks help when needed																
Occasion 1																
Occasion 2																
Completes task on time																
Occasion 1																
Occasion 2																
Produces appropriate product																
Occasion 1																
Occasion 2																
Does after-task activity																
Occasion 1																
Occasion 2																

Comments:

Occasion 1

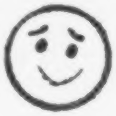
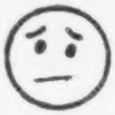
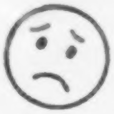
Occasion 2

Scoring:

4. Performed Beyond Expectation
3. Expectation Met
2. Almost Meeting Expectation
1. Expectation Not Met

The following assessment may be given for the children to fill out with respect to their own feelings in taking part in the activity involved in this project. It may be given at intervals throughout the year as groups are used in the classroom or at regular intervals (beginning, middle, and end of the school year).

Scoring: Color in the appropriate face.

Always   Sometimes Never 

Assessment List: Child's Self Assessment

Name ______________ Date ______________

1. I feel that every member is doing his or her job (including myself).
2. I feel that I help the group make decisions.
3. I help to solve disagreements and problems in the group.
4. I do my part to help the group complete assignments on time.
5. I learn how to work within a group.
6. I improve in pre and post test scores through the participation in the group.
7. I provide support for my group members.
8. I respect the members of my group.
9. I give positive comments to members of my group.
10. I am able to summarize the work of my group.
11. I can communicate the results and findings of my group in a meaningful manner.
12. I demonstrate good behavior skills working with members of my group.

Additional Comments:

INVESTIGATIVE SKILLS
by Phyllis Gaskins

AGE LEVEL	Early and Upper Elementary
TYPE	Performance/Portfolio
FOCUS	Science as critical thinking and inquiry

Science

3.4 The student will record and describe information gathered from first-hand experience.

3.7 The student will place natural events in order and use the sequence to tell what comes next.

Students will investigate physical and living systems. These SOL's are specific to this particular goal; however, all of the science SOL's could be addressed with this assessment tool. A variety of topics lend themselves to setting up investigative situations; therefore, SOL #3.8 - #3.17 could also be met and measured with this assessment. The students are assessed on their ability to complete the investigative process. This includes making a hypothetical statement, using senses appropriately, asking questions, collecting and organizing data, and using the collected data to answer questions and draw conclusions.

ASSESSMENT PURPOSE

_X_ Making instructional decisions
_X_ Monitoring student progress in the classroom
_X_ Communicating and using summative evaluation
___ Monitoring student progress externally
_X_ Validating student achievement
If used over time
_X_ Evaluating programs
If this were used school/district wide data could be collected to assess strengths and weaknesses of this portfolio format as a means of instruction and assessment.
___ Addressing Accountability

SETTING

A rural school of approximately 250 students with two classes of each grade (K-5). Student population socio-economic backgrounds range from parents with doctoral degrees to families with minimal education. Job descriptions include doctors, professors, teachers, secretaries, factory laborers, farmers, and the unemployed.

ADMINISTRATION

For Teachers

Background Knowledge Needed to Perform Student Task and Assessment

The students would need to have had prior experience with writing a hypothetical statement, writing questions, collecting data, using the senses to gather information, answering questions and drawing conclusions. Each of these could be taught in lessons designed to teach a specific skill or skills within the content of science, health, or math activities. The students would need enough background in the content area to make an appropriate hypothetical statement and draw conclusions.

Estimated Time for Activity and Assessment

The assessment is intended to be a portfolio of growth over time in each of the skill areas of the investigation process and an informal inventory of the students' ability to do a complete assessment containing all of the skills in one investigative activity. The individual lessons to teach/measure a given skill area would be part of the regular curriculum and a folder would be kept of the student's responses. The teacher would evaluate student progress and the students would evaluate their own progress. This evaluation would be sent home for parent feedback. In addition to this on-going process, a complete assessment would be given at the beginning, (middle), and end of the year. The folder would monitor growth over time, and the complete assessment would give a *snapshot* of the student's *overall* ability. Lessons may be from 20-90 minutes and may be broken into two or more sessions.

Instructional Strategies to be Used

Students may work as individuals, in pairs, or in cooperative teams but will formulate hypothetical statements, write questions, etc. individually, even though they may be performing the experiment with others. Students whose writing communication is good may be scored on the basis of how they record their answers data; others may be observed and/or may respond orally to the teacher. (In my class of 22 third graders there were five which I needed to observe more closely and have them respond orally to the items. All attempted to respond in writing.)

Description of the Activity

Activities should be chosen by the instructor as part of the regular curriculum in health, science, and/or math. The format should follow the same as the examples included in this demonstration package. The third grade sample is on the digestive system (chewing) and the fourth grade sample is about plants. The assessment is alternative because it is not a traditional *teach-test* approach but allows the students to learn content in the process of being assessed in their investigative strategies, no letter grade is assigned (although grades could be given), and it lends itself to the use of portfolios. It is authentic because scientist use the strategies in *real* scientific investigation.

Materials

- These would be determined by the type of activity chosen by the instructor.

For Learners

Instructions vary according to the type of activity chosen. All should include a discussion of the Look-Fors in "kid-language."

LOOK-FORS

During the activities, observations will be made to determine if:

1. The student makes a hypothetical statement.
2. The student asks appropriate questions.
3. The student uses several senses to make observations.
4. The student collects and organizes data from observations.
5. The student answers questions and draws conclusions.

RUBRIC SCORING

Scoring Standards: (* indicates mastery)

Ask Questions:

4- Demonstrates higher level thinking by asking more in-depth questions.

3* Uses at least three different question starters and questions are complete.

2- Demonstrates ability to write three complete questions.

1- Uses question starters but not all questions are complete.

Senses:

Record # senses used.

*A=appropriate and I=inappropriate

Collect and Organize Data:

4- Shows a high level of organization and accuracy.

3* Data accurately collected, suitable for answering questions, and well organized.

2- Data accurately collected using appropriate method.

1- Unsuccessful method of collecting data (inaccurate, unorganized, illegible).

Answer Question and Draw Conclusion:

Hypothetical Statement:

1-Attempts hypothetical statement but wording is illogical.

2-Writes a logical h. statement based on knowledge gained through observation.

*3-H. statement is logical and reasons are given for statement (I think...because...).

N/A = Not Assessed at this time.

RECORD-KEEPING

See attached Rubric Sheets. The "Individual Assessment of Investigative Skills" is designed to be part of each student's investigative portfolio (see sample "Log".) The "Investigative Skills Assessment" is intended for use by the teacher for scoring both during and after the assessment activity. Each student will do an individual assessment after completing three activities in the "Log". The teacher will assess each activity using the rubric and make individual comments. (Not all "Look-Fors" will be assessed in every activity in the "Log").

PARENT INVOLVEMENT
The "Log" will then be sent home for parent response evaluation in the form of comments. A letter will be sent home to the parents explaining the "Log" and then a conference will be held with each student's parent(s). (See sample letter.) After determining the student's strengths/needs, activities can be planned to enhance their learning.

PILOT RESULTS

Roadblocks Encountered

There were no roadblocks in piloting in my own classroom; however, the teacher who had agreed to pilot with me decided at the last minute NOT to do it. This was a setback but also a blessing. I was able to find a teacher in another building to pilot test it in her classroom. This project received very favorable reviews from her and I have included her letter with this package. (See next page.)

Revisions Made After the Field Test and Pilot Test

The rubric for the "Look-For": "Asking Questions" was revised **FROM:**

Asks Questions:
1-Student writes at least one question.
2-Writes 2 questions.
*3-Writes at least 3 different types of questions.
4-Demonstrates higher level thinking by asking more in-depth questions.

TO:

Asks Questions:
1-Uses question starters but not all questions are complete.
2-Demonstrates ability to write three complete questions.
3-Uses at least three different question starters and questions are complete.
4-Demonstrates thinking by asking more in-depth questions.

Scored Student Responses

A sample of a student "Log" is attached with that student's "Individual Assessment of Investigative Skills".

A copy of both the third grade and fourth grade group "Investigative Skills Assessment" is attached. Also a copy of a student's response to each assessment of all of the skills is attached.

Observation by Parents

Two parents observed and wrote "detailed" accounts of the third grade assessment. These are also attached.

Dear Parents,

Our class will be working on investigative skills in science, math, and health this year. Each student will be assessed on skills necessary for observing, collecting data, and writing hypothetical statements and descriptive summaries.

At the end of each six-week period each student's "Investigation Log" will come home. It will contain the student's work and an "Individual Assessment of Investigative Skills" form with a brief description of each activity and student performance rating. Each student will be rated on a scale of 1-4 on each of the given tasks which are called "Look-Fors". The scale is explained on the "Individual Assessment ..." form. I will also make a brief statement about student progress on each activity. The student will complete a self-evaluation form which will be included in the "Investigation Log".

Please review the student's work and assessment, then make a comment in the "Parent's Comments" section on the assessment sheet. These comments may be to the student or to me. They may be statements or may be questions for the student or me to answer. Please feel free to write on the back if you need more space.

If you have a question or concern about the process, please call _____ (school) and I will get back with you to set up a conference or you may call me at home at _____.

Thank you for your support,

Observation of a Science Class: (approximately 1 hour)

Grade 3 - Mrs. Gaskins, by Christina Buckwalter

The class was divided into five groups with four to five children in each group. Each group was given a plate with the following materials: 2 plastic glasses of water, 2 sugar cubes, a plastic bag, and 2 spoons.

Mrs. Gaskins asked the students to imagine putting a sugar cube into a cup of tea or coffee. She asked them to imagine putting some crushed sugar into a cup of water and a sugar cube into some water. She asked them which would dissolve the fastest? She asked the students to write down a hypothetical statement about what kind of sugar would dissolve the fastest - the cube or the crushed sugar. Mrs. Gaskins said their statements should begin with "I think", which she wrote on the board. They were instructed to write why they thought what they did. The children began writing immediately. It was obvious they understood the directions. Children helped each other with the spelling of words. Mrs. Gaskins walked around the room with a checklist of her class list, observing the students and then marking which students did not understand the instructions.

The class then proceeded to do the science experiment. One student read the directions to the experiment, which were on the worksheet. The teacher went around the room crushing one of the sugar cubes in the plastic bag. The students performed the experiment. They put the sugar cube into one glass of water and the crushed sugar cube in the other glass of water. They stirred each glass of water five times and observed the glasses of sugar water.

The students were asked to complete the next question on the worksheet telling what happened. A typical comment was, "The crushed sugar dissolved faster."

A student was asked to read the next question on the worksheet, which told them to reread their hypothetical statements. The students were told to write whether or not what they thought would happen did happen. Mrs. Gaskins walked around checking to be sure the students wrote a statement and not just a word or two. She made it clear to the class that it did not matter whether or not their hypothetical statement was right or wrong.

The class continued by beginning a new experiment. Mrs. Gaskins asked the class to think about what would happen if they chewed a carrot chunk or gumdrop in their mouth or if they just put the carrot chunk or gumdrop in their mouth and didn't chew it. Mrs. Gaskins told the class to write three questions about having the food in their mouth without chewing and three more questions about chewing the food. The class listed "question starters" like *are, if, is, would, will, who, what, why, where,* and *did*. The students wrote questions like, Will it be good? Will it dissolve? Does it turn into liquid? The teacher constantly moved around the room observing and helping those children with special needs to think and write their questions.

The class needed to leave their tables without completing the experiment, because it was time for music. But the teacher gave each child a gumdrop just for fun.

When the class returned, they put a chunk of carrot in their mouth, held it for awhile, and then chewed. The students repeated this procedure for the gumdrop. Then the students were given time to answer the six questions they had asked before they did the experiment.

Mrs. Gaskins asked the group to think about how chewing affects digestion. She asked the following questions?

* Which sugar digested faster?

* Why is chewing food important?

* How does chewing affect digestion?

* What happens when food gets to you stomach?

* What would happen if a carrot chunk landed in your stomach?

* What would happen if a chewed up piece of carrot landed in your stomach?

The students wrote their conclusions on their worksheet. The teacher circulated around the room with the class checklist, observing what children wrote. The teacher continued to ask questions to help clarify the assignment when she found some students were unsure or had written unclear conclusions. Other questions Mrs. Gaskins asked were:

* Where does digestion start?

* What happens if a carrot chunk versus a tiny

piece of carrot were in your stomach?

* Will it be harder or easier for your stomach to digest a carrot chunk?

* Will you stomach digest a tiny piece of carrot faster or slower than a chunk of carrot?

* Is one easier than the other? Why?

The children discussed the answers with each other. Then they wrote about choking if the carrot piece were not chewed properly. Some students wrote that chewed up food digests faster. Then the class wrote about which senses they used to do the science experiment. Lastly, the students completed a self-evaluation, answering questions about whether or not they wrote a hypothetical statement, whether or not they wrote different types of questions, and about which senses they used.

I am pleased to have had the opportunity to participate in Mrs. Gaskins' pilot program. After speaking with Phyllis, I became excited about all of the possibilities for the use of this framework for my own science program.

I was able to use her framework to organize a science lesson on plants. The students were scientists for the day! They assumed their roles and were very excited throughout the entire activity. They generated hypothetical statements, wrote and answered questions, collected and recorded data, and wrote conclusive statements. In the experiment they also documented the senses that they used and evaluated themselves on how they completed the activity.

I truly believe that this is an effective way to teach science. It not only was exciting for the students, I enjoyed it too. All students were motivated and anxious to get results. I think that this program could be used in other subject areas. I can see myself using this program in math and in social studies as a way to enhance learning. Students would, in my opinion, be more motivated to dig deeper into the material if presented in this manner.

Concerning assessment, this program goes right along with the portfolio assessment we are currently using. Student work can be kept and pulled out from time to time to see areas of growth and to share with parents.

I am excited about this program! I feel that I am more motivated than ever to strengthen my science program. My students will greatly benefit from this new energy within me, and they will become better scientists as we continue to place a strong emphasis on the scientific process.

INDIVIDUAL
ASSESSMENT OF
INVESTIGATIVE
SKILLS

Student: ____________________

Six Week Period: _____

HS	Q	C&OD	ANQ	DC
Student makes a hypothetical statement. (If...then...)	Student asks questions about the system.	Student collects and organizes data from observations.	Student answers questions.	Student draws conclusions.

Date: ________

Activity:

HS	Q	C&OD	ANQ	DC

Date: ________

Activity:

HS	Q	C&OD	ANQ	DC

Date: ________

Activity:

HS	Q	C&OD	ANQ	DC

Date: ________

Activity:

HS	Q	C&OD	ANQ	DC

Scoring Standards
* indicates mastery

HS-Hypothetical Statement:
- 1- Attempts hypothetical statement but wording is illogical.
- 2- Writes a logical hypothetical statement.
- *3- Hypothetical statement is logical and a reason is given for the statement.
- 4- Supportive details are included with the hypothetical statement.

Q-Ask Questions:
- 1- Uses question starters but not all questions are complete.
- 2- Demonstrates ability to write three complete ques.
- *3-Uses at least three different questions starters and questions are complete.
- 4- Demonstrates higher level thinking by asking more in-depth questions.

C&OD-Collect & Organize Data:
- 1- Unsuccessful method of collecting data (inaccurate, unorganized, illegible)
- 2- Data accurately collected
- *3- Data accurately collected and well organized
- 4- Student shows a high level of organization & accuracy.

ANQ Answer Questions:
- 1- Answers incorrect
- 2- Some answers incorrect and/or unanswered
- *3- All answers correct
- 4- Student demonstrates a high level of recording answers (uses complete statements)

DC- Draw Conclusions:
- 1- Student attempts to make a conclusive statement but wording is illogical.
- 2- Student writes a logical conclusion.
- *3- A logical conclusion is written and a reason is given for the conclusion.
- 4- A logical conclusion and reason are written and supportive details are included in the statement.

☐ - Not evaluated at this time.

Teacher Comments:

Parent Comments:

____
Signature

NAME: ______________________________

DATE: ___________

Health Unit: BODY SYSTEMS

HYPOTHETICAL STATEMENT

Based on what you know about things dissolving (coffee in water, sugar in tea, etc.), make a hypothesis about the amount of time you think it will take these two things (sugar cube and sugar cube crushed) to dissolve (same, faster, slower).

You Will Need

2 plastic cups, 2 spoons, 2 cubes of sugar, water

Directions

1. Half fill each cup with water
2. Crush one sugar cube into small pieces.
3. Put the crushed sugar on a spoon.
4. At the same time, drop the sugar cube in one cup and crushed sugar cube in the other cup.
5. Stir each five times.
6. Watch what happens to the sugar in each cup.

THINK ABOUT IT: Tell what happened.

____

____

____

READ YOUR HYPOTHESIS: Write a summary telling if your hypothesis was correct. Did what you think was going to happen really happen?

____

____

____

____

Given a piece of carrot and a gumdrop. Write questions before you do this activity.
This is what you will do:
1. Put the piece of food in your mouth. DO NOT CHEW.

Question #1:__________________________________

____

Question #2:__________________________________

____

Question #3:__________________________________

____

____

2. Chew each piece of food separately and swallow.

Write questions about what you will find out by doing this.

Question #1:

Question #2:

Question #3:

PERFORM THE ACTIVITIES ABOVE AND ANSWER YOUR QUESTIONS.

What conclusion can you make about chewing food and digestion?

What senses did you use and how did you use them?

Self-Evaluation

Hypothetical Statement:

____ I tried.
____ I did a good job.
____ I did an excellent job.

Collect and Organize Data:

____ Neat
____ Correct
____ Well Organized

Ask Questions:

____ How many?
____ Were they different types of questions?

Answer Questions and Draw Conclusions:

____ I answered all questions.
____ My answers were correct.

____ I made a statement, it was

Senses Used:

____ Sight A I Touch A I
____ Smell A I Hearing A I
____ Taste A I

INVESTIGATIVE SKILLS ASSESSMENT

Topic:______________________________ **Activity:**____________________

LOOK-FORS assessed: ________________ STUDENT	1. Student asks questions about the system.	2. Student uses several senses to make observations.	3. Student collects and organizes data from observations.	4. Student answers questions and draws conclusions.	5. Student makes a hypothetical statement (If..then..)

Scoring Standards: (*indicates mastery)

Ask Questions

4 - Demonstrates higher level thinking by asking more in-depth questions.
3 - Uses at least three different question starters and questions are complete
2 - Demonstrates ability to write three complete questions.
2 - Uses question starters but not all questions are complete.

Senses: Record # senses used. *A = appropriate and I = inappropriate

Collect and Organize Data:

4 - Shows a high level of organization and accuracy.
3 * Data accurately collected, suitable for answering questions, and well organzied
2 - Data accurately collected using appropriate method.
1 - Unsuccessful method of collecting data (inaccurate, unorganized, illegible).

Answer Question and Draw Conclusions:

4 - Shows high level of recording answers and writes descriptive, conclusive statement.
3 * Questions accurately answered and conclusive.
2 - Correct answers to all questions.
1 - Answers incorrect or not all questions answered.

Hypothetical Statement:

3 * Hypothetical statement is logical and reasons are given for statement (I think... because...).
2 - Writes a logical hypothetical statement based on knowledge gained through observation.
1 - Attempts hypothetical statement but wording is illogical.
N/A = Not Assessed at this time.

BEST COPY AVAILABLE

Format for Developing an Assessment Activity
to Assess Investigative Skills

Student Name: ______________________________ Date __________

ACTIVITY: ________________________________ (This could be a teacher-made activity or one taken from the text of a unit of study. Be certain to remove any outcome information which might be of a hypothetical nature because the intent is for the student to create his/her own hypothesis. Be certain to list materials the students will be using and include any necessary directions for using the materials.)

HYPOTHETICAL STATEMENT: Look at the materials that are given for this activity. Based upon what you know about __________________________ make a hypothetical statement about what you think might happen and why.

QUESTIONS: What are some questions which might be answered by performing this activity?____
____

TRY THE ACTIVITY AND TELL WHAT HAPPENED:___________________________
____

READ YOUR HYPOTHESIS: Write a summary telling if you hypothesis was correct. Did what you think was going to happen really happen?_____________________________
____

ANSWER YOUR QUESTIONS. What conclusion can you make about __________________
____?

SENSES: What senses did you use and how did you use them?_____________________
____

IMPROVING OBSERVATION SKILLS

by Linda Hutson

AGE LEVEL Early Elementary
TYPE Performance/Portfolio
FOCUS Science as understanding patterns and relationships and as investigation through experiential methods.

The focus of this assessment is to give students specifics such as size, color, texture, shape and smell to look for when observing. A checklist helps students to organize their information for recording in their science journals.

Science

2.2 Observe and describe changes that take place over time in both living and non-living things
2.4 Record and describe information gathered from observations or measurements
2.5 Make inferences after observations of an object or event
3.4 Record and describe information gathered from first-hand experiences
3.15 Identify some characteristics of major groups of plants and animals

Albemarle objectives

- Compare and contrast the methods by which plants and animals perform life-processes
- Explain similarities and differences between living things in various habitats
- Describe ways in which populations of plants and animals in a community interact with one another and with the environment

ASSESSMENT PURPOSE

_X_ Making instructional decisions
A teacher can use the information from teacher observations and students observations to see what the students' needs are.

_X_ Monitoring student progress in the classroom
Because this project is a year long both teacher and student can compare observations collected and see improvements. I would hope that this assessment would encourage a student to self evaluate as the year progressed using the scoring scale.

_X_ Communicating and using summative evaluation
During the year we will collect information over a period of time and then share it with parents and students.

_X_ Monitoring student progress externally
Observations and scoring scales and comments will be kept in the student's science notebook. Anecdotal notes and copies will be in child's portfolio.

___ Validating student achievement
___ Evaluating programs
_X_ Addressing Accountability
In previous years when I've asked children to observe trees I found that this was a difficult task, and no specific data was collected. I found that when I gave them specifics to "look for" the expectation was there. The second graders I field tested this project with understood the look fors. Even though I "broke them down" (see checklist) these look fors gave them a focus during the observation session.

SETTING

Woodbrook School in Albemarle County, Charlottesville, is a small community school with an enrollment of 196 children in kindergarten - fifth grades. The school is nestled in the center of Woodbrook Subdivision. Our school has three K-1 classes, 2 second, 2 third, 1 fourth, 1 fifth, and 1 fourth-fifth grade combination classes. Our school does not qualify for Chapter I assistance. Parents are actively involved in our school. Woodbrook has an active P.T.O. and Volunteer program. This self contained second grade classroom has 17 students. The children are heterogeneously grouped. Only four children from this group are in a one parent family living situation -all others are in a two parent family situation.

ADMINISTRATION
For Teachers

My second graders have each adopted a tree. We used trees as a class project to begin with using size, shape, color and texture as ways to describe. (Children may select other things to describe. Please note that we used this project to begin.) Each child will observe their tree for the year and record data in his science journal. The children have been given look-fors, scoring scale, and a checklist. This project will last from early October - June 1994 with the children. Three observation sessions using the look fors occurred before I scored the children using the scoring scale. Because these second graders are just beginning to develop various observation skills, I felt that using the look fors and practicing was important.
Previous experiences for the children include:

- teacher modeling *how to* describe items
- what collecting data means and why it is important
- how to web
- attentions to size, color, shape, texture as ways to describe item
- reading books about trees before we started our adopt a tree project

Day 1: I described the *Adopt a Tree* project with the children. We talked about collecting data (Children have had previous experience with this through science) and some things that we might *look for* when we observe a tree. The children generated size, color, shape, feel or texture. After this I handed them our *look-fors*. We discussed looking for these things each time that we observed the trees. We stapled these look fors in our science journal so we would have these to refer to . Next we gathered pencils, clipboard, science journals, crayons, and a dry erase board with look fors printed on it and went outside. As a large group we went on a tour, identified, and observed all the trees in the front of the school. Next the children selected their trees, named them and began to collect data. (I moved from group to group observing the children. As I watched I noticed that the look fors on the sheet I had given them seemed like too much for them to go through. My teammate for second grade came up with an idea to create a checklist for the children that would break down each item the children were looking for so they could organize their thoughts and data in a more concise way. On observation day #2 I want to try this.) After 45 minutes we went back to class and discussed the look for and the observation outside. Some children shared that it was a lot to do, but they enjoyed it.

Day 2: This session began with reviewing the look fors. I shared my observations from our first session and shared that Miss Gatewood and I had made something (*copy of the new checklist is attached) that we thought would help them organize their data more efficiently. I was curious to see if the children would be able to stay with the task longer and if this checklist that *broke down* the look fors would be of assistance to them. We went over the checklist (Parts 1 and 2 only for today.) and I modeled how to check off items as they had observed them. We collected materials and went outside. (Today I also took a photograph of each child in front of or beside their tree to put into our science notebook. As I observed the children today, the checklist seemed to help them stay focused on the observation. The checklist fits with the look for sheet, but it is written in very simple, concise terms for the children. After we completed the observation session we went back to the classroom. Here are some of the responses:

D.F. "The checklist was fun. It helped me and I tried very hard to finish it."

M.L. "I might not have needed it. I can look at the look sheet and list everything from that."

T.B. "Sketching the leaf was hard."

D.R. "The checklist was easy to do."

K.W. "It was hard to finish."

T.A. "I don't know. I used it. I finished everything on it."

I worked individually with children during our outside observation time. Some children needed support with recording information but the checklist seemed to give them some sense of accomplishment. I wonder if I could buddy someone up with those children or if I just need to continue to be there with them. S.B., who has difficulty staying with a task needed me to guide him through various items and show him how to check off an item. He was able to stay focused for a longer period of time. I worked with him through all of part one and then said that I would return after I went to other children. He had part two completed and seemed to feel quite proud of himself. I am anxious to see if over time this checklist helps the student organize the information they are collecting.

Day 3: SCORING DAY

I gave out the scoring sheets and discussed the scoring scale with the children today. They seemed very serious about this observation. I passed out their checklist, they gathered materials and we went outside. I have selected three samples from the room. These show various abilities in the classroom and they are attached to this narrative.

For Learners

*I. This checklist was made for my second graders to help them break down their look-fors shown in the previous pages. Students could use this as a guide. This checklist would not be used each time but perhaps during the first few times observing.

Name______________________________

You and I will be looking for these things as you collect and record information about your *tree. We will call these our look fors.

The student will:

1. use several senses to make observations. (seeing, smelling, touching and hearing)
2. notice size, color, shape, texture, and location when observing and include these as you record your information in your journal.
3. use more than one way to record your information. (words, pictures, webs, charts, sketches, other.)

*This is a generic "look-for" list.
Teachers/students could use these look fors to describe various things.

For Learners II.

Part 1 The Tree

____ I have identified my tree. (dogwood,maple,oak)
____ I have dated my notebook today.
____I have described the color of my tree.
____I have described the shape of my tree.
____I have described the size of my tree.

Part 2 The leaves

____I have described the color of the leaf.
____I have traced a leaf from my tree.
____I have done a rubbing of the leaf.

Part 3 The bark

____I have felt the bark on the tree and described how it feels.
____I have described the color of the bark.
____ I have done a rubbing of the bark.

SCORING RUBRIC

Scoring Scale - Adopt a Tree

___ 4. Student's work goes beyond expectation. The student has used size, color, shape, and texture to describe in a variety of ways (graphs, pictures, rubbings, webbing, words) and the observation provides detailed data. The student was focused on the observation during the entire session.

___ 3* (mastery)Student has described tree using size, color, shape, texture and has used several ways to collect information. Student is able to focus on observation for a longer period of time.

___ 2. Student is almost there. Student uses more than one way to collect information but needs support with staying focused or collecting information on tree.

___ 1. Little information gathered. Student does not use size, color, shape, texture, when recording information.

Comment After the observation teacher would conference with each student to share scoring and discuss the data collected. Teacher would ask questions such as:

1. What did you do really well during this observation?

2. How have you improved as an observer? etc.

Reflections on Scoring I found that along with the scoring scale that my personal observation of the children that day also played a part in the scoring of their observations. For example, one very capable student spent about half of the observation time not focusing on the observation. She completed about half of the work and received a score of two. She could have scored a four if she had put some effort there. I will share that with her when we conference. Another child just barely completed the checklist, BUT he was on task the entire time outside. His notebook entry for him was remarkable! (I feel that a teacher could make narrative comments to the children, too. I found that if I jotted down notes as I watched the children on the 22nd that it helped me as I was scoring.)

RECORD-KEEPING

This project will continue from September through June 1994. To keep track of observations and scoring I keep the scoring scale and comments of our conference stapled inside the child's science notebook directly behind the observation I scored. This way the child has his observation AND scoring scale with comments right there in his science notebook. We can compare two observations and have all information in front of us. I also Xerox some of these observations to go into each child's portfolio. (A sample of a beginning of the year observation and then one at the end of the year is usually taken.) I find that conferences are a natural part of our classroom and they do not require hours of time! Generally each conference requires about seven or eight minutes per child.

During observations sessions I also take my own narrative notes. These generally stay with me (*in each child's portfolio/folder) and are used when appropriate during conferences with children or parents.

PARENT INVOLVEMENT

The scoring scales and data were shared with parents during conferences. Parents commented that they liked seeing what was required (look-fors) and how the look-fors were scored. Many parents commented that their child collected more information than usual, and specifically focused on size, color, shape and texture.

(May 1994) *Science journals are also sent home bi-monthly so parents may share in their child's learning. We are now continuing with "look-fors" (size, color, shape, texture) in a class garden that we have planted. I'm seeing the children using size, color, shape, texture, and taste as they describe!

Scoring Scale - Adopt a Tree

Date:

____ 4.	Student's work goes beyond expectation. The student has used size, color, shape, and texture to describe, in a variety of ways (graphs, pictures, rubbings, webbing, words) and the observation provides detailed data. The student was focused on the observation during the entire session.
____ 3.	*(mastery)Student has described tree using size, color, shape, texture and has used several ways to collect information. Student is able to focus on observation for a longer period of time.
____ 2.	Student is almost there. Student uses more than one way to collect information but needs support with staying focused or collecting information on tree.
____ 1.	Little information gathered. Student does not use size, color, shape, texture when recording information.

Student Self Evaluation

Name ______________________________

Date ____________________

HOW I COLLECTED THE INFORMATION:

I have recorded information about my tree using:

_____ size
_____ color
_____ shape
_____ texture

I used:

_____ words
_____ pictures
_____ rubbings
_____ webs
_____ charts
_____ other when I observed my tree

What did you do the best on today during the observation?
____

Why?
____

What do you feel is the most difficult part for you as you observe your tree?
____

NAME____

You and I will be looking for these things as you collect and record information about your *tree. We will call these our look fors

The student will:

1. use several senses to make observations. (seeing, smelling, touching and hearing)
2. notice size, color, shape, texture, and location when observing and include these as you record your information in your journal.
3. use more than one way to record your information. (words, pictures, webs, charts, sketches, other.)

* This is a generic "look for" list. Teachers/students could use these look fors to describe various things.

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AN ASSESSMENT GLOSSARY[1]

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Assess, assessment. To "assess" is to analyze student accomplishment – often using a range of documentary techniques (e.g. performances, questionnaires, observations, etc.) When used in an evaluative sense, an "assessment" is a careful judging of the quality and range of achievement.

Is a "test" different from an "assessment"? The distinction is perhaps more one of attitude, as implied by the word's Latin origin: to assess is to 'sit with' the student. A "test" is usually thought of as being an *efficient* form of assessment: the aim is to evaluate student achievement using a small, usually indirect, set of items. The "assessor" has more of an obligation than the "test-maker" to ferret out or evoke all of what the student knows and can do.

Authentic assessment. An "authentic" assessment is composed of worthy tasks – challenges which we want students to master. Authentic assessment thus teaches the students (and teachers) what demonstrated uses of subject matter are considered most important. The test tasks are chosen because they are representative or simulated versions of essential questions or challenges facing practitioners in the field.

An 'authentic' test thus directly measures students on the performances we value. Multiple-choice tests are by definition, indirect. They are "proxy" forms of measurement (though perhaps *valid*; see below). By calling a test or the tasks which compose it "inauthentic" the speaker is suggesting that the 'items' are simplistic and overly-indirect forms of testing.

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[1] prepared for the New Standards Project, Snowmass, Colorado, July 29 - August 4, 1991.

In sum, an authentic assessment should –

1) engage the student in challenges that represent the 'tests' likely to face them as professionals, citizens, or consumers.

2) be composed of tasks that look like the best kinds of instructional activities: oral histories, science labs., computer simulations, debates, research projects, etc.

Benchmark(s). A benchmark is the specific product or performance used for setting the standards in an assessment. The benchmark "anchors" the scoring scale. Without the benchmark an assessment would be relative or norm-referenced: the "best" result would simply be the best of what we received in the assessment; that "best" might still be mediocre. The selected anchors thus set the *standard.* They also make the test criterion-referenced: we would no longer expect scores to be distributed along a normal curve. We might get very few products or performances – or even none at all – that match the quality of the top anchor.

Criteria. To ask "what are the criteria to be used in judging student work?" amounts to asking: "Where should we look in examining this product or performance? What aspects of performance are most important? For what kinds of errors will we then take points off, and to what degree?" We must also determine how much we should weight each criterion relative to other criteria in making our judgment: yes, language usage and development of ideas are both important in judging writing; what percent should we assign to each, however?

A failure to carefully consider criteria when designing tests or evaluating student work can undermine the ability to send a clear (hence, *fair*) message to students about expectations; it also threatens test "reliability" (see below). How shall we weight the relative point values of the test questions? How should we weight 'form' (such as the importance of writing a 5-paragraph essay, or being neat in writing)? Should we overlook invented spelling? Should we give partial credit for good 'process' but wrong answers?, etc. Some procedure is necessary to insure that there is a sufficient consensus on the answers to these questions; reliability depends upon the answers being known and shared.

Holistic Scoring. Authentic tests are often scored 'holistically' in the sense that a score is given based upon an over-all judgment of the completed product or performance. In most state writing assessments for example, readers are asked to make an overall judgment about a paper's quality, without noting any specific criteria.

But there are other kinds of performance assessment scoring systems. In "primary trait" or "analytic" scoring of essays, for example, one reads an essay but through the 'lens' of a specific dimension or set of traits, considered in turn – often by separate readers (e.g. reading a paper twice, in the first case judging for "syntax" and the second for "rhetorical effectiveness" using separate *rubrics* for each trait).

Input vs. output. What we supply the student (curriculum, instruction, and assessment tasks) is "input" and what the student gives us back as finished work, on assignments and assessments, is "output." Many educators confuse the relation between the two: giving students better tasks to do is not sufficient to cause excellent student work; changing the curriculum and assessment merely alters the kind of challenges undertaken, not the "quality control" necessary to ensure that student output meets or exceeds stated expectations.

Consider, for example, the sheet music, football playbook or script for a play: those "inputs" may be as first-class and thorough as can be; but they, themselves do not guarantee quality performance. That depends upon the teacher setting clear, high standards; providing the right kind of feedback; not accepting incomplete or shoddy work, etc.

Outcomes. "Outcomes" is shorthand for "intended outcomes of instruction." Outcomes are thus general goal statements for students, schools and school systems. To operationalize outcomes we have to agree on the specific "standards and measures" – the tasks, criteria and standards by which the outcomes will be assessed.

Open-ended (tasks or questions). A task is 'open-ended' if it is non-routine. Thinking is open-ended when one is presented with a problem or question with either no "right" answer, or in which the justifiable answers can be obtained by an almost infinite variety of solution paths. Essay test questions typically are all

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open-ended. By contrast, all multiple-choice tests are, by design and definition, not open-ended.

This is not to say, however, that answers to open-ended questions or problems are only a matter of personal taste or caprice. Some answers are expected to be better than others, based on what "works" (or doesn't work) in context; or the range of responses and products is judged according to specific criteria (as when we evaluate the logic of an argument, the use of evidence, or the way in which a problem has been conceptualized). Such answers are thus "justified" as opposed to "correct."

Such questions thus demand more than knowledge: they demand good judgment and imagination. All good essay questions or design problems are thus ill-structured: even when you know what is expected you have to scratch your head, and methodically craft and refine – often revising as you go – your solution or product. Often with such problems, the student may not know how to get productively under way, even with a great deal of prior training and "knowledge."

All open-ended questions are ill-structured; the reverse is not necessarily the case. Ill-structured problems can have clear, unambiguous and correct answers (as in the task of designing the cheapest trip to Europe), but there still is no mechanical procedure for solving the problem correctly.

Performance assessment. To perform is to "act upon and bring to completion." To perform in the intellectual realm involves using one's knowledge to effectively act or bring to fruition a complex product in which one's knowledge and expertise is revealed. Music recitals and auto mechanic competitions are performances in both senses; so are oral exams.

A performance assessment thus differs from a conventional paper and pencil test in the same way that the driving test for one's license differs from the written test. In the former case, the test is meant to realistically simulate driving 'performance' – to replicate some typical 'tests' that arise in daily driving. In the latter case, we test for knowledge of driving facts and rules, not whether the student knows how to employ them in 'performing' the act of driving.

The use of the word "performance" highlights an important difference between authentic and multiple-choice tests. Consider any performer, be it the

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athlete, debater, dancer, scientist or actor. They 'perform' with knowledge in the sense that they must fashion or construct responses to problems arising in a fluid and complex context; their knowledge is used to fashion new knowledge or meaning. By contrast, multiple-choice tests merely ask the student to recall or recognize isolated 'items' of finished knowledge, one at a time. Rather than being tested as apprentice performers with knowledge, students are typically asked on tests to be more like learned spectators of other people's knowledge.

'Performance' also implies that the student must gain control over a complex 'whole' activity (the game, recital or play) for which one practices and learns the 'knowledge' required. A typical test, by contrast, often asks students to apply one skill or fact to one isolated question – more like the drills for performance than the performance itself. Paper-and-pencil tests can be "performances" if the task and scoring system are like 'real life' tests of our written ability, but it is rare in real life that men and women are asked to recognize a right answer in a field of wrong ones, as opposed to generating the right answer themselves.

Since many performances can be ephemeral actions, fair assessment typically involves the creation of *products*. This insures adequate documentation and the possibility of appropriate review and oversight in scoring the performance.

Portfolio (sometimes appearing just as *folio*). A portfolio is a representative and judicious collection of one's work. As the word's roots suggest (and as is still the case in the arts), the collection is carried from place to place for inspection or exhibition, usually as a kind of resumé.

In academic subject areas such as English/Language Arts or Mathematics, a portfolio often serves two distinct purposes: providing a documentation of the student's work, and serving as the basis for evaluation of work-in-progress or work over time. The documentation typically serves three functions: revealing the student's control over all the major areas/techniques/genres/topics of the course or courses, allowing students to reflect on and show off their best work (by letting them select which works will be put in the portfolio), providing evidence of how works evolved and were refined.

For evaluation purposes, portfolios can do what traditional assessment cannot do: provide direct evidence for evaluating the student's ability to make progress, over time, at mastering essential concepts and techniques of the course.

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Often, students are asked to choose a 'best' piece or to distinguish between 'major' and 'minor' pieces as part of the evaluation. Thus, the student's judgement is being evaluated, in addition to the collected works.

In evaluating portfolios teachers can profit from working together to ensure greater *reliability* in scoring. A procedure used extensively in Great Britain and Australia, where portfolio assessment is common, is to have meetings where people bring samples of the best, middle-level, and worst student work from the portfolios at which time grades are re-calibrated based on a consensus about standards.

Process. In the context of assessment, "process" refers to the intermediate steps the student takes in reaching the final performance or end-product specified by the assessment. "Process" thus includes all strategies, decisions, sub-skills, rough drafts and rehearsals used in completing the given task.

In being asked to evaluate the 'process' leading to the final performance or product, the assessor is sometimes asked to explicitly judge the quality of the student's intermediate steps, independent of what can be inferred about those processes from the end result. For example, one might be asked to separately rate a student's ability to work with a group or do pre-writing as part of a research project – independently of the ultimate product the group or individual writer produces. We should beware of routinely scoring 'process' separately, however, even if in teaching we want to promote and assess development of those 'process' abilities. After all, as the word "performance" implies, the emphasis is on whether the final product or performance met the standards set – irrespective of how the student got there.

Product. A product is the tangible and stable residue of a *performance* and the *processes* that led to it. The product is *valid* for assessing the student's knowledge to the extent that success or failure in producing the product a) is dependent upon the knowledge we taught and want to assess, and b) appropriately 'samples' from the curriculum in a way that mirrors the relative importance of the material in the course.

Reliable, reliability. Reliability in testing refers to the likelihood that the score or grade would be constant if the test were re-taken or the same performance were re-scored by someone else. Error is unavoidable; all tests, including the best multiple-choice tests, lack 100% reliability. The aim is to minimize it to tolerable levels.

This kind of error may not be a defect in the test, but a statistical fact about how extraneous factors inevitably influence test-takers or judges. Instructions are mis-read; the wrong box is marked; judges disagree, sometimes for good reasons.

In performance assessment the reliability problem typically occurs in two forms: 1) to what extent can we generalize from the single or small amount of performances to performance in general? and 2) what is the likelihood that different judges will see the same performance in the same way? Most test-makers – and school board members – would insist on 80% reliability or better.

How can we obtain such reliability in "subjective" assessment? First, ensure that there are multiple tasks for the same outcome. Think of athletics: one game or event is rarely enough to generalize about a performer's ability, even at the professional level. Secondly, use trained judges, working from specific 'anchor' papers/performances and with clear criteria, to ensure adequate "inter-rater reliability." Even then, some oversight process is usually desirable to ensure that judges apply criteria and standards consistently – without "drift" due to fatigue or other factors – and fairly.

Rubric. A rubric is a set of scoring guidelines for giving scores to student work. (The word derives from the Latin word for "red" and was once used to signify the directions for conducting religious services, found in the margins of liturgical books – and written in red). The rubric answers the question: What does mastery (and varying degrees of mastery) at this task look like?

A typical rubric:

- contains a scale of different possible points to be assigned, often ranging from 4 or 6 as the top score, down to 1 or 0 for the lowest scores in performance assessment;

- states all the different major traits or dimensions to be examined (e.g. "syntax" or "understanding of scientific method");

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- provides key signs or salient traits of performance or product for finding the right place on the scoring scale to which a particular student result corresponds. Note, therefore, that a rubric signifies that the assessment is "criterion-referenced," implying that scores are determined by mastery and should not necessarily be distributed along the 'normal' curve.

Sample. There are two kinds of "sampling" going on in all forms of test design: sampling with respect to the domain of all possible curricular topics and tasks, and sampling of the student population.

In the former case, we are asking: what feasible and efficient sample of tasks or questions will enable us to make *valid* inferences about the student's overall competence – since we cannot test the student on everything that was taught and learned. In the latter case we are talking about the test-takers, not the test; we are asking the question the pollsters ask: what must be the composition of any sample of students from which we could validly infer conclusions about the system-wide performance of all students?

One way to do both forms of sampling at once, and thus test in a very efficient and effective manner, is to do "matrix sampling": ask different samples of students to take different sub-tests, the sum total of which add up to the whole student population's ability on a complete range of tasks. Thus, on a school-wide writing test, we could test all students but give one of six possible kinds of writing tasks to each student, and then draw inferences about all students' ability to handle all the genres of writing (as they do in California's state writing test).

Scale. The demarcated continuum (number-line) for scoring performance; the range of numbers (or letters) within which we score work. Performance assessment typically uses a much smaller scale for scoring than standardized tests. Rather than a scale of 100 or more as found on most tests, the majority of performance-based assessment use a 6-point scale; rarely does a scale contain more than 11 points. To use a scale of so many points makes reliability unlikely, and attempts at such fine criterion-referenced distinctions become picky or arbitrary.

Secure, security. A test is 'secure' when teachers and/or students do not have prior access to the test for purposes of preparation. Most multiple-choice tests must be secure or their validity is compromised since they rely on a small number of questions with 'correct' answers provided within the stated four or five choices. Interestingly, many valid performance assessments are not secure. The student to be assessed knows the musical piece, debate topic, oral exam questions, or term paper subject in advance; the teacher/coach fairly 'teaches to the (known) test' of performance.

Too little attention has been paid to the invalidity of using secure tests: if the task is not known in advance, and if the student cannot fully rehearse to produce quality, and cannot use resources in the testing situation, then what is really being tested?

Task. A task is a complex assessment activity. (The British use the phrase "integrated task" to capture this idea). It demands that we bring to bear a repertoire of knowledge and skill to solve a multi-faceted problem or question through a series of judgments and actions. Most tasks are goal-directed: they are 'done' when we have successfully fashioned a performance or product to specifications. Standards are set in relation to expectations about student performance on tasks. Task development, therefore, is a way of articulating and exemplifying performance standards.

A task thus differs from a conventional test item in the same way that "successfully building a balsa bridge to withstand y pounds per sq. inch" differs from solving physics textbook problems. Some sample tasks follow:

MATHEMATICS:

1. A performance 'engineering' task (for middle or high school):

Design the largest possible closed container from a given amount of stiff colored paper.[2]

- Determine the amount of paper used for each container.
- Determine how large capacity of container will be when completed.
- Construct the actual container.
- Keep a log of your progress (or lack of it).
- Justify your answers in a report, detailing your activities and sources.

All sources, including friends, parents, teachers, books, journals, etc. must be acknowledged in the report. All formulas used must be clearly stated and their source acknowledged.

2. from COMPACT - the Conn. Common Core of Learning Project:

a. Which Supermarket Has the Best Prices?

"Design a research project for comparing the prices in two local supermarkets. What items and prices will you compare and why? How will you justify the choice of your 'sample'? How reliable is the sample? etc."

[the work is to be done both individually and in groups; group scoring rubric may be found in the scoring rubric section]

b. How Much Does it Cost to Take A Shower?

Students are expected to investigate energy costs using not only their knowledge of math and science but their ability to explore the hidden "costs" such as environmental damage, plumbing equipment, etc.

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[2] courtesy of Glynn Meggison, Fox Lane H.S. Bedford NY

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3. The Pythagorean Theorem revisited

When you study the Pythagorean theorem you discover that the square on the hypothenuse equals in area the sum of the squares on the other two legs.

BUT......Must the figure to be drawn on the legs __be__ a square? Could one use the leg as a piece of a different shape so that the theorem would still be true? If so, the theorem would read:

A x (area of shape) + B x (area of shape) = C x (area of shape).

What other figures/shapes make the theorem work?
What is the more general formula?

4. Math task for grades 3-5:

Students are asked to estimate the number of M & M's in a large container. The students propose, justify, try out, and check their strategies.

Materials:

- M & M's
- Paper and pencils
- large scoop
- different size containers
- Balance scale
- Weights for balance

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ENGLISH/LANGUAGE ARTS:

1. *Grade 3-5 Reading Assessment, Upper Arlington Schools, OH*

SUGGESTED PROCEDURES:

1. Ask the child to bring up a book he/she has recently finished reading, and his/her list of books read.

2. Have the child tell you about the book. Ask follow-up and probing questions (below). Relate your observations to the descriptors (next sheet below).
   "Tell me about this book."
   "Why did you select this book?"
   "Did you like this book? Why or why not?"
   "What would you tell a friend about this book/chapter?"

3. Have the child choose a part to share with you. If the child is uncertain, help the child select a short passage to read aloud.

   - primary passages may be from 100 to 200 words
   - intermediate passages may be from 200 to 400 words
   - have child read passage silently then read same passage aloud
   - while listening, estimate word accuracy:
     97 - 100% = easy
     90 - 96% = instructional
     below 90% = difficult
   - intervene when child stops and cannot proceed. Tell the word, have child read on
   - make positive comment about reading performance in general, brief terms:
     "You read aloud well"
     "Sounds like a good book"

4. Attitude. Ask:
   "What are your favorite stories/books?"
   "What authors do you like best?"
   "Do you like to read?"
   "Do you think you are a good reader?"

5. End with a positive comment. Consider focus for future instruction.

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2. A 9th-grade multi-day writing assessment[3]

Days 1 - 4: Pre-writing class lessons & activities:

- *watching an excerpt from "Stand And Deliver"*
- *reading and discussing a poem and an essay on teachers*
- *bringing in pictures of themselves as elementary school students*
- *field trip to local elementary school*

Day 5: Writing in class

Select one of your past learning experiences which you remember well. Write an autobiographical essay in which you: 1) narrate the circumstances (where? when? why? how?); 2) describe the "teacher" and his/her significance as well as your own reactions at the time; and, 3) interpret your present feelings about it. Why do you remember? What does it mean to you now?

Be sure to use specific details, including conversation.

This writing sample will be completed in class today. On day 10 your final copy must be handed in.

Day 6 - 9: Revision, editing, and final copy produced.

- *Papers scored by district language arts teachers.*
- *Writing scored on 4 equally-weighted dimensions, using a 4-point scale for each: Content, Organization, Language Usage, Mechanics*

3. Write a play (4th Grade)[4]

Students, in groups of 4-5, will be asked to select a story from their reader to adapt into a play. The group will re-write the story, agree on the part each child shall play. Each child will select one appropriate prop to signify their character. After a few days of practice, they will read the play to the class as a readers theater production.

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[3] part of a twice-yearly district-wide K-12 writing assessment in Cherry Creek, CO.

[4] courtesy of the Kentucky Council on School Performance Standards.

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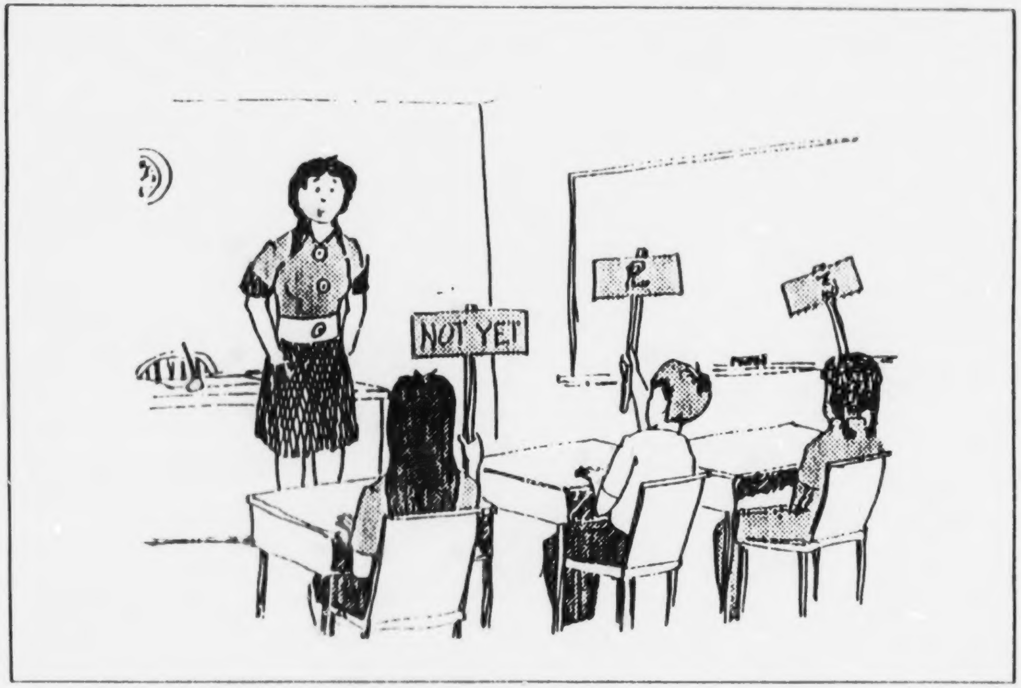
ASSESSMENT
ASSESSING
ASSESSORS

- ~ Who
- ~ What
- 393 ~ Where
- ~ When
- ~ Why
- ~ How

- * Administration 394
- * Types



Mrs. Grizlow was not amused when her students practiced their scoring rubric on her spring wardrobe.

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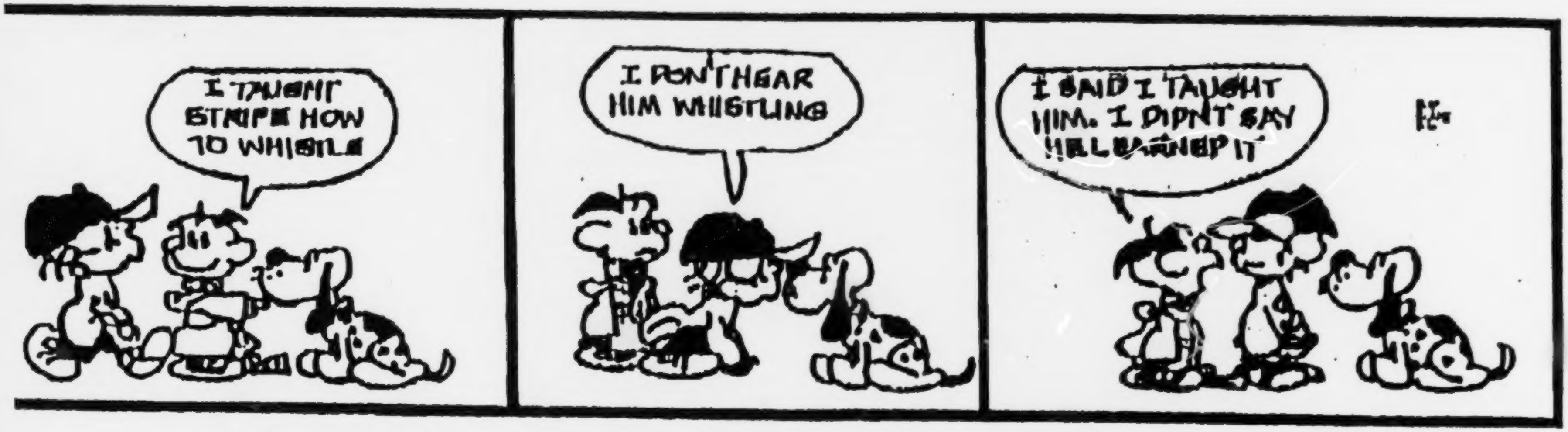
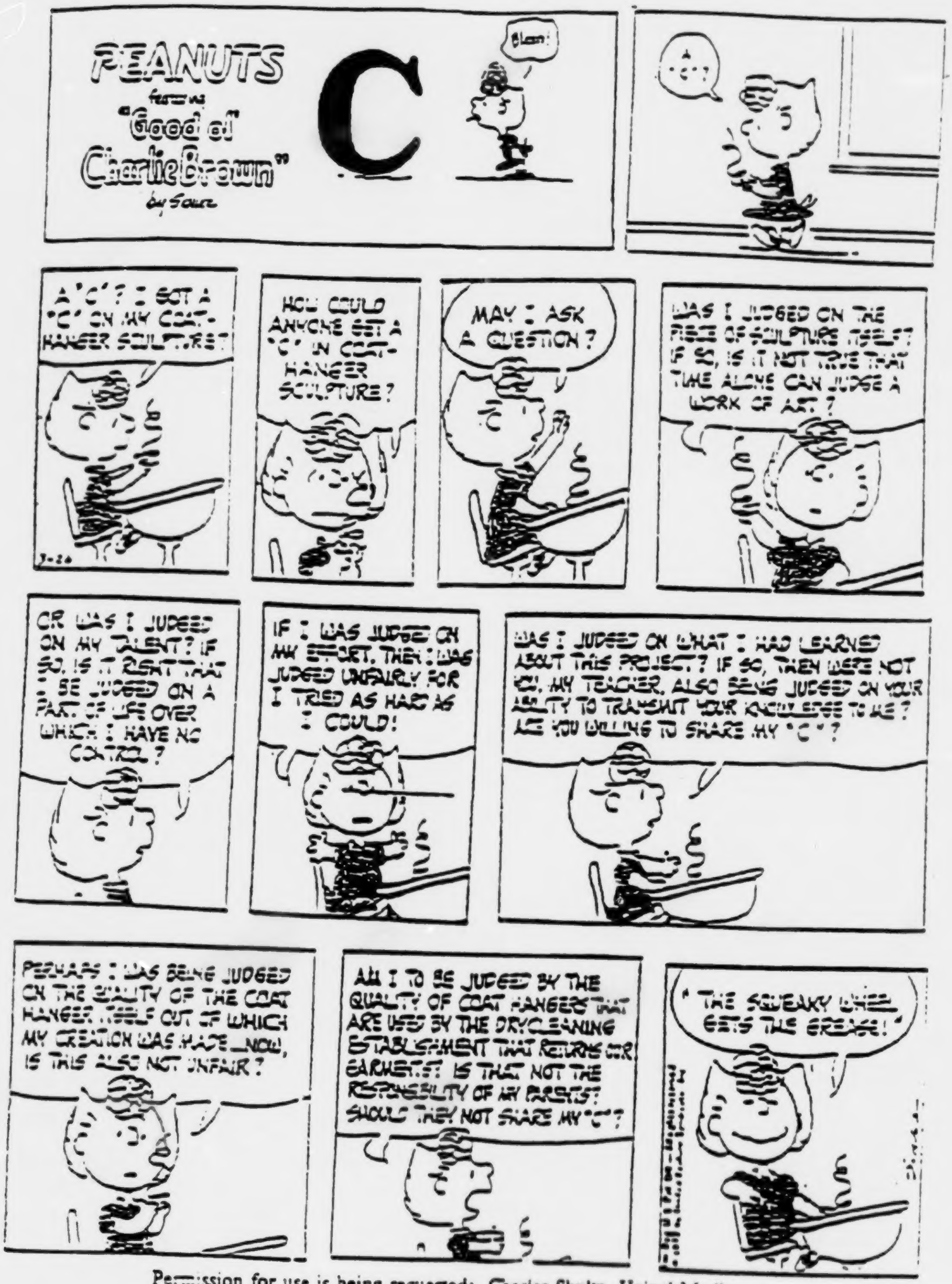

I TAUGHT STRIPE HOW TO WHISTLE
I DON'T HEAR HIM WHISTLING
I SAID I TAUGHT HIM. I DIDN'T SAY HE LEARNED IT

(permission for use is being requested: Bud Blake, King Features)


PEANUTS
featuring "Good ol' Charlie Brown" by Schulz
C
Blam!
A "C"?
A "C"? I GOT A "C" ON MY COAT-HANGER SCULPTURE?
HOW COULD ANYONE GET A "C" IN COAT-HANGER SCULPTURE?
MAY I ASK A QUESTION?
WAS I JUDGED ON THE PIECE OF SCULPTURE ITSELF? IF SO, IS IT NOT TRUE THAT TIME ALONE CAN JUDGE A WORK OF ART?
OR WAS I JUDGED ON MY TALENT? IF SO, IS IT RIGHT THAT I BE JUDGED ON A PART OF LIFE OVER WHICH I HAVE NO CONTROL?
IF I WAS JUDGED ON MY EFFORT, THEN I WAS JUDGED UNFAIRLY FOR I TRIED AS HARD AS I COULD!
WAS I JUDGED ON WHAT I HAD LEARNED ABOUT THIS PROJECT? IF SO, THEN WERE NOT YOU, MY TEACHER, ALSO BEING JUDGED ON YOUR ABILITY TO TRANSMIT YOUR KNOWLEDGE TO ME? ARE YOU WILLING TO SHARE MY "C"?
PERHAPS I WAS BEING JUDGED ON THE QUALITY OF THE COAT HANGER ITSELF OUT OF WHICH MY CREATION WAS MADE...NOW, IS THIS ALSO NOT UNFAIR?
AM I TO BE JUDGED BY THE QUALITY OF COAT HANGERS THAT ARE USED BY THE DRYCLEANING ESTABLISHMENT THAT RETURNS OUR GARMENTS? IS THAT NOT THE RESPONSIBILITY OF MY PARENTS? SHOULD THEY NOT SHARE MY "C"?
"THE SQUEAKY WHEEL GETS THE GREASE!"

Permission for use is being requested: Charles Shultz, United Media

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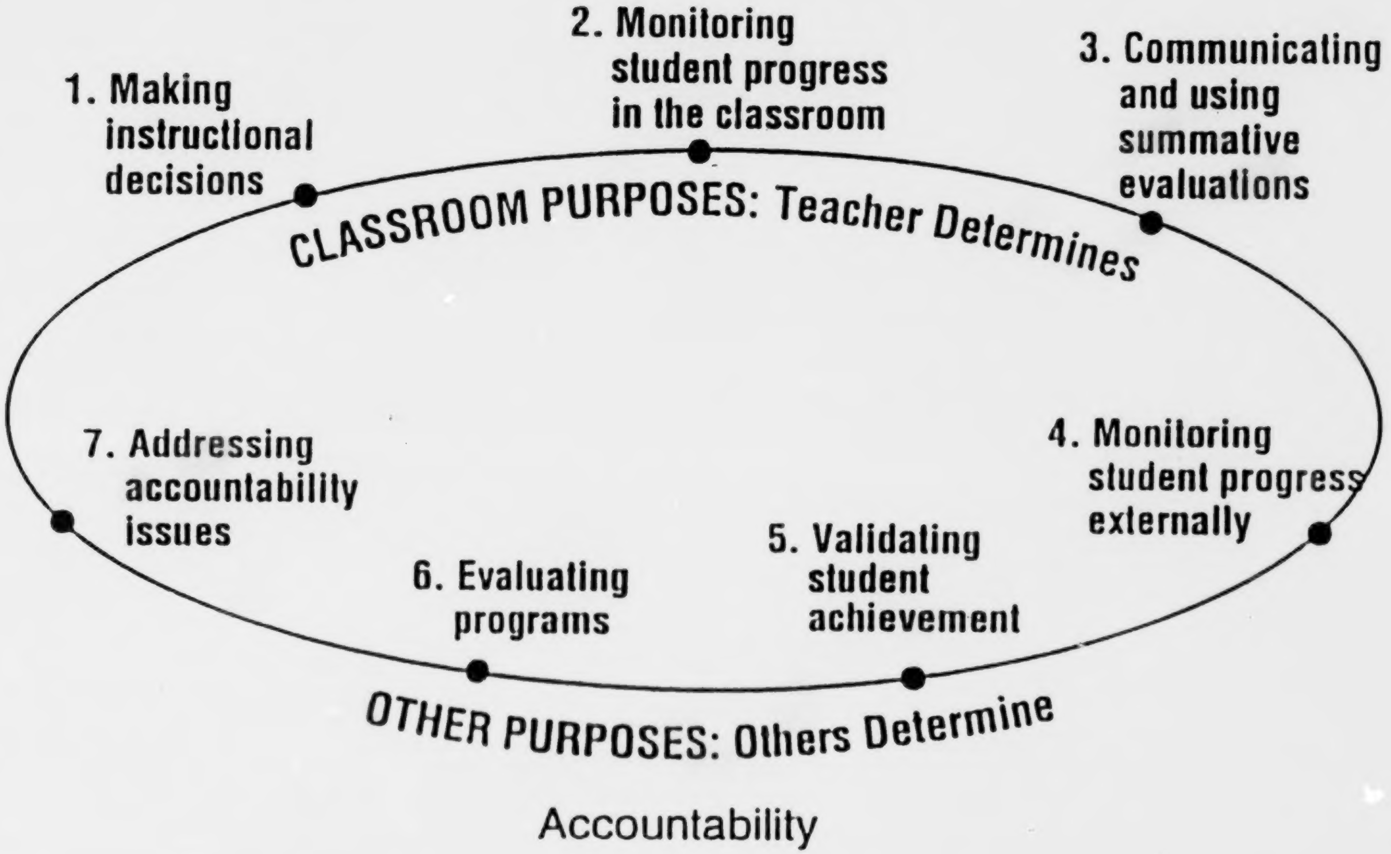
1. Making instructional decisions
2. Monitoring student progress in the classroom
3. Communicating and using summative evaluations
CLASSROOM PURPOSES: Teacher Determines
7. Addressing accountability issues
4. Monitoring student progress externally
6. Evaluating programs
5. Validating student achievement
OTHER PURPOSES: Others Determine
Accountability

Figure 1: Seven categories of educational purposes

Assessment Purposes

Purpose 1: Making Instructional Decisions

Assessment is the link between teaching and learning. As such it is a dynamic, ongoing and critical process that shapes classroom environments and students opportunities to learn. Through assessment, teachers monitor the success of their practice and make instructional decisions.

Purpose 2: Monitoring Student Progress

Assessment as a means of monitoring student progress describes students' development and documents their progress towards specified goals. The primary audience are teachers and students. Monitoring encompasses informal judgments based on classroom observations and interactions, as well as those based on written assignments and formal presentations. It can describe the progress of groups of students as well as individuals. This ongoing process also provides the data for summative evaluations. Students as well as teachers share responsibility for monitoring their progress. When teachers and students collaborate in monitoring progress student learning is enhanced and the teaching-learning process becomes open.

Purpose 3: Communicating and Using Summative Evaluations

Periodically, we pause in the learning process to reflect on what we've accomplished. We aggregate data on student learning. What we gather and report communicates what we value. Summative evaluations involve both the aggregation of data about student progress and the communication of that data. Preparing a valid summary is a complex responsibility that requires careful planning, quality judgments of student performance (valid inferences), and the thoughtful synthesis of evidence into a formal description. Formats vary. Including student work enhances the communication of student progress.

Purpose 4: Monitoring Student Progress Externally

The monitoring of student progress via externally established performance standards should be wedded to the ongoing instructional assessment in the classroom. This marriage is viewed as an equal partnership, with each supporting the other. Some of that support comes from the incorporation of classroom assessments into the external assessment process. The external performance standards on which students are to be assessed should be established with the help of classroom teachers, who can recognize which tasks are relevant to their classrooms as well as which classroom tasks are relevant to the external evaluation.

Purpose 5: Validating Student Achievement

The purpose of establishing the validity of student achievement is to attest that an individual student has demonstrated a specific level of accomplishment. One might liken this process to earning a merit badge in scouting, or passing the Department of Motor Vehicles driving test. In validating student achievement we, simultaneously place value on a student's past achievement as well as give public expression to our confidence that the student is ready to face the next challenge. student certification should not be based on a single assessment event. However,

Purpose 6: Program Evaluation

A program evaluation must collect information from a variety of sources and in a variety of ways in order to provide meaningful feedback for teachers, students, and those making policy decisions. This process includes activities such as documenting strengths and weaknesses, as well as planned and unplanned outcomes. The intent is to make commendations and/or recommendations concerning the program.

Purpose 7: Accountability

Accountability is a shared responsibility that connects each of the six basic purposes for assessments. Those who are accountable for student achievement includes all stakeholders - students, teachers, administrators, parents and policy makers.

There are criteria for accountability:

- *Levels of Performance*
- *Value Added and accountability based upon gain rather than absolute level of performance*
- *Position in Distributions*[1]

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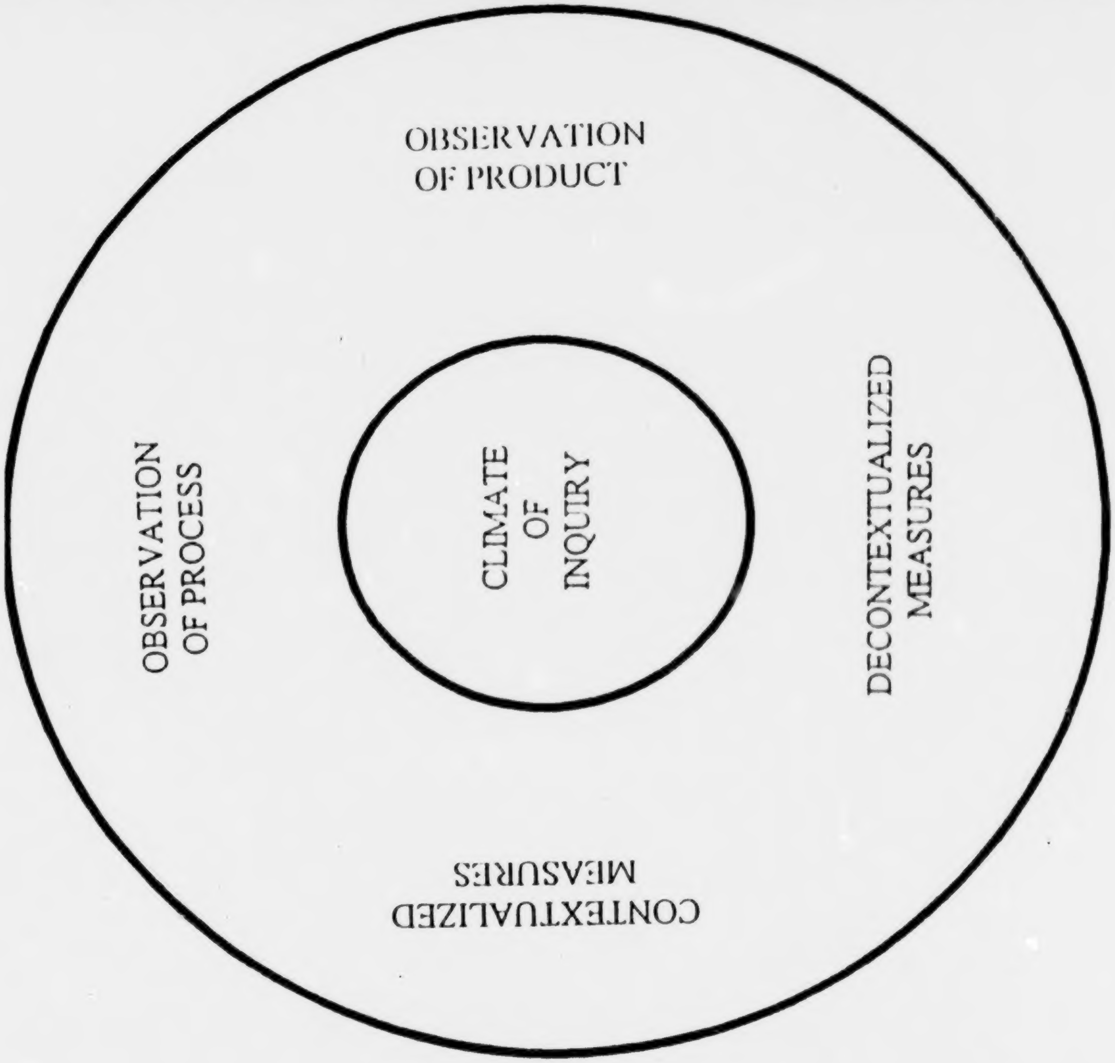
[1] Adapted from: NCTM: Assessment Standards for School Mathematics. Working draft October 1993


OBSERVATION OF PRODUCT
OBSERVATION OF PROCESS
CLIMATE OF INQUIRY
DECONTEXTUALIZED MEASURES
CONTEXTUALIZED MEASURES

CLIMATE OF INQUIRY
DATA GATHERING PROFILE
contexts

MEASUREMENT

Contextualized Measures

inventories, checklists
teacher-made tests
proofreading exercises
cloze exercises
informal reading inventories
interest/attitude surveys
unit or book tests
dictations
holistic writing assessments
informal reading/writing evaluations

Decontextualized Measures

standardized achievement tests
minimum competency tests
school, district, or state tests
norm-referenced tests
criterion-referenced tests
writing vocabulary (Clay, 1985) (K-2)
letter, letter-sound, and word tests (K-2)
spelling tests, vocabulary tests
diagnostic tests/surveys
worksheets

OBSERVATION

Observation of Process

anecdotal records
interviews, probes
conversations
response groups for writing
retellings
participation in mini-lessons
shared reading experiences
shared writing experiences
passage reading in books
running records/miscue analysis
audio tapes, video tapes
note-taking samples
one-to-one writing samples
drafts, revisions, sketches
oral presentations
problem-solving groups

whole-class evaluations
responses through performing arts
reading environmental print (K)
dramatic play
learning centers

Observation of Product

responses to open ended questions
literature response logs
learning/reflection logs
writing journals
self-evaluations
completed enterprises/projects/activities/assignments/reports/research/
graphs/charts/illustrations
student-created questions/tests
notebooks
writing folders
reading records of books read
vocabulary records
writing samples (plays, poems, letters, stories, published pieces)
responses through visual arts
portfolios

* Working Draft *

ASSESSMENT APPROACHES

INCLUDE

SELECTED RESPONSE "FORMATS"	CONSTRUCTED RESPONSE "FORMATS"	PRODUCT ASSESSMENTS	PERFORMANCE ASSESSMENTS	PROCESS-FOCUSED ASSESSMENTS
• multiple-choice	• fill in the blank	*WRITTEN*	• musical, dance, or dramatic performance	• oral questioning
• true/false	• short answer	• essay, story, or poem	• oral presentation	• interview
• matching	• label a diagram	• research paper	• science lab demonstration	• process folio
	• "show your work"	• writing portfolio	• athletic competition	• self-assessment checklist
	• concept map	• diary/journal	• debate	• think aloud
	• figural representation	*OTHER*	• typing test	• learning log
	• essay answers	• science project	• performance tasks	• "kid watching"
	• open-ended questions	• art exhibit		• conferences
		• videotape		
		• exhibitions		

adopted from McTighe and Ferrara (in press)

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The Process of Assessing for Monitoring Student Progress

- Deciding what to assess and how to assess it
- Selecting appropriate assessment methods
- Choosing assessment tasks and opportunities
- Making inferences from student responses
- Reporting and using results

Issues Associated With Changing to New Assessments Systems

Conditions for Implementation

- Involvement
- Public Valuing
- Support
- Cost-benefit balance

Challenging Traditions

- Grouping and tracking
- Grading practices
- Conventional tests
- Norm referencing

Relationships to Other Reforms

- Technology
- Opportunity to learn
- OBE
- National goals and world class standards

Issues Associated With Changing to New Assessment Systems

Conditions for Implementation

1. involvement of teachers and other stakeholders in the development of new assessment systems:
2. public valuing of teachers' judgments and contributions in the assessment process;
3. support of teachers so they become the primary assessors of student performance;
4. reasonable cost-benefit balance for the development of the new assessment systems.

Challenging Traditions

Four issues are raised about how this reform vision is related to--

5. grouping and tracking of students for instruction;
6. grading practices;
7. conventional tests;
8. norm-referencing.

Relationships to Other Reforms

9. uses of technology for assessment;
10. "opportunity to learn" standards;
11. "outcome-based" movement;
12. national goals and world-class standards.[1]

---

[1] Adapted from: NCTM: Assessment Standards for School Mathematics. Working draft October 1993

Effective Feedback	Ineffective Feedback
Provides guidance and constant confirming (or disconfirming) evidence of achievement e.g. a map and road signs	Provides praise or blame, or non-situation-specific advice or exhortations e.g. "paper is vague" and "try harder"
Comparing current performance and trend vs. successful result e.g. the on-going taste and appearance of the food, not the recipe alone, guarantee the meal as described	Naively assumes that instructions and hard work are sufficient to reach goal e.g. planting seeds and watering according to package does not ensure a successful garden
Timely: immediately usable	Not timely: too long a delay in usability; or too late to use
Frequent	Infrequent
In terms of absolute progress: assessment of the accomplishments Specific degree of conformance vis a vis the exemplar, goal or standard: e.g. you are 8 miles from destination, and need to turn left at next road ahead	In terms of **relative change or growth**: assessment of student behaviors or attitudes Relative to the self or norms: tells you how far you've come, not how far, and in what direction you must go, to get 'there'; tells you how close people generally get
Descriptive language predominates in assessing aspects of performance e.g. you made a left turn onto Main St. instead of a right turn	Evaluative or comparative language predominates in assessing performance e.g. you made many correct turns and one incorrect turn; your navigating is greatly improved and better than most of your peers

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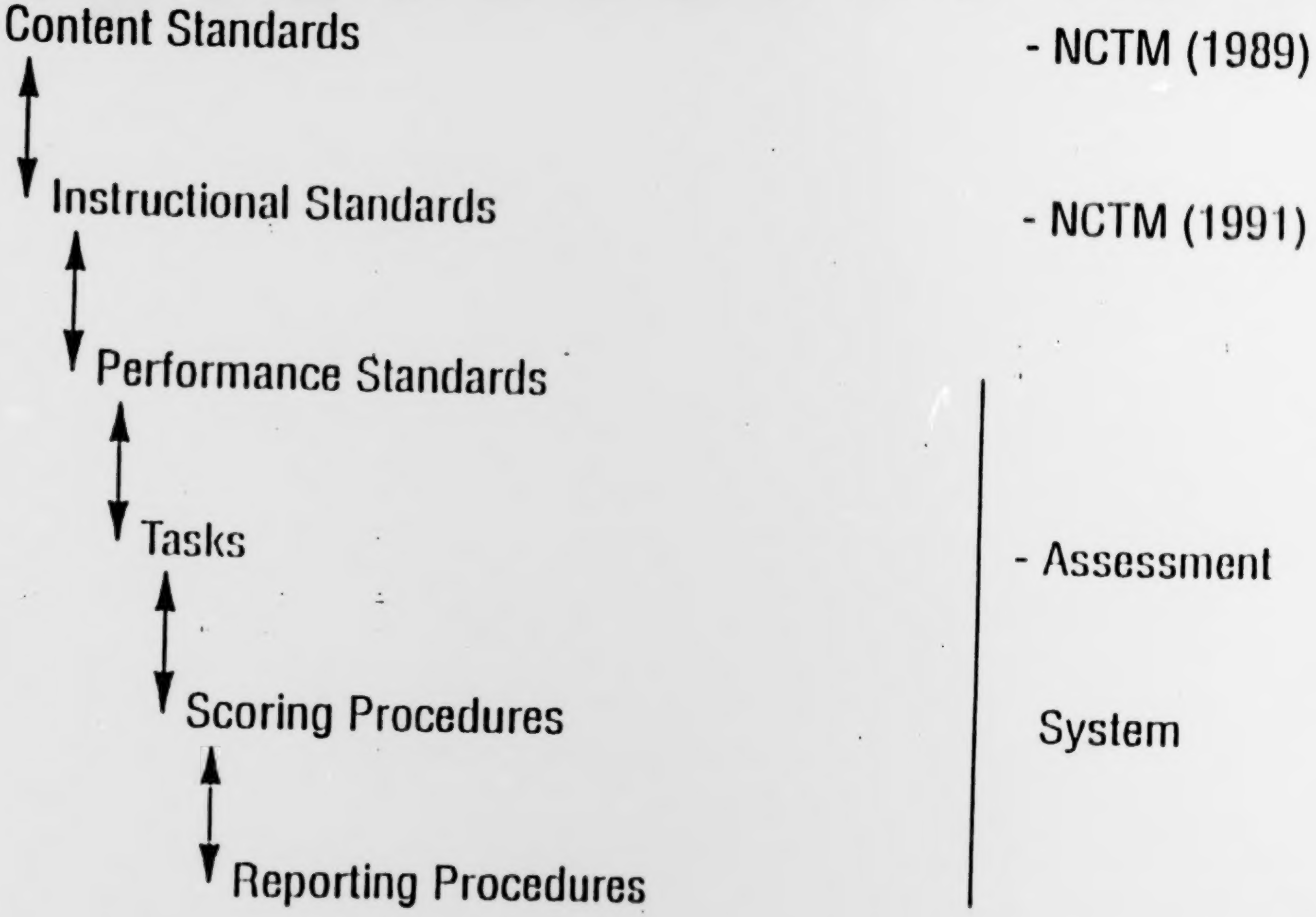

Content Standards
- NCTM (1989)
Instructional Standards
- NCTM (1991)
Performance Standards
Tasks
- Assessment
System
Scoring Procedures
Reporting Procedures

Figure 3. Relationships between content, instructional standards, and an assessment system. (Adapted from Romberg & Wilson, in press)

Assessment Checklist

Using the following checklist, review your own assessment and the samples provided.

Assessment Title/Focus: ________________________________

Assessment Author : ________________________________

Purpose of Assessment: (check as many as apply):

___ making instructional decisions ___ monitoring student progress in the classroom

___ communicating and using summative evaluation ___ monitoring student progess externally

___ validating student achievement ___ Evaluating programs ___ addressing accountability

Characteristics of the Assessment

high degree low degree

- reflects exit-level outcomes and standards 5 4 3 2 1

Comments:

- includes tasks, criteria and standards that are predictable or known and are clearly related to the essential aspects of effective performance. 5 4 3 2 1

Comments:

- has constraints that are consistent with real-life 5 4 3 2 1

Comments:

- improves performance toward a standard that is validated against adult roles 5 4 3 2 1

Comments:

- can be used to improve performance not just record results 5 4 3 2 1

Comments:

- presents engaging, simulated real-life problems, challenges and/or questions of importance and substance 5 4 3 2 1

Comments:

- requires learners to use knowledge and construct meaning, not just recall data 5 4 3 2 1

Comments:

- provides learners with the opportunity to justify their response 5 4 3 2 1

Comments:

- provide information that allows the learner to self-adjust 5 4 3 2 1

Comments:

- OVERALL COMMENTS

Blue Ridge Assessment Research Project
Revised Project Plan
September 22, 1993

Diane Foucar-Szocki, Project Director

Introduction

Our project is a year-long teacher-centered effort to generate alternative assessments. We will work in early childhood settings with an emphasis on third grade.

Teachers from six Virginia school divisions, Rockingham, Harrisonburg, Albemarle, Fluvanna, Greene and Orange will work together in collaborative, cross-division teams to develop, pilot test and revise these alternative assessments. Our higher education partners include Piedmont Community College and the University of Virginia. Each will provide talent and expertise in assessment. JMU is not currently a formal partner, however, JMU's involvement and support is significant.

The focus of this work is learning. Together we will learn about how curriculum and assessment changes truly take place in various school settings. We will record the conditions that encourage success and what barriers impede our process. We will learn what is realistic to expect and what expectations might need modification. Simultaneous with this learning, we will produce classroom based alternative assessments of worth. Some of these assessments may have utility at a division or state level, however, that will not be our focus. Finally, in this process we further develop the professional capacity of Virginia's teachers by involving them in the real work of educational reform.

Philosophy

Virginia teachers are knowledgeable and experienced practitioners. From their practice these educators create knowledge and develop questions regarding their work. Respecting this, participants in this project are encouraged to actively pursue questions regarding the design, development and use of alternative assessment by acknowledging what they already know about the subject and building upon their knowledge in a meaningful way. We will work collaboratively to broaden our perspective and critically examine the use of alternative assessment in our contexts. This project will allow for optimum collaboration among participants. It will foster an open and participatory process of assessment design for use in rural early childhood public school settings.

Assumptions

This project is guided by the following assumptions regarding assessment:

1. That assessment activities are an integral part of the instructional program; learning and the assessment of learning are simultaneous events.
2. That high-quality assessment activities have the characteristics of high-quality lessons--direct and active student participation, tasks that are interesting and motivating, tasks that can be differentiated for a variety of learners, and the ability of students to make choices.

3. That criteria and models of successful performance are part of the teaching/learning process, so that students being assessed understand clearly what success on the task looks like and can focus their work toward meeting the criteria.

4. That students and parents are part of the assessment process and should actively, thoughtfully, and continually examine student work.

5. That assessment tasks provide students with a variety of ways to demonstrate competence, including performance tasks, open-ended questions, group and individual projects, and portfolio development.

Professional Development

The project will also be guided by the following assumptions about professional development:

1. That opportunities for professional development should exist along a continuum, from awareness-level introductory experiences to intensive, long-term involvement. There should be a variety of entry and exit points along this continuum.

2. That professional development activities should focus on student outcomes; and that any strategies, research, methodologies, etc. should be presented within the context of those outcomes.

3. That professional development is not just for teachers, but has as its audience the entire school community (e.g. parents, administrators, support staff).

4. That a curriculum for professional development can and should be in place which establishes desired outcomes for teachers, and guides the planning of professional development opportunities.

5. That professional development is most effective when it incorporates opportunities for teachers to test their learning and understanding in a supportive environment.

Goals & Objectives

1. To build a cooperative and collaborative community of educators who are using their expertise and experience to work toward the common goal of developing classroom-based assessments for quality learning and teaching in early childhood public school settings.

2. To produce teacher-designed and tested early childhood assessments keyed to existing division level measures including Standards of Learning, Division curriculum guides, and national professional organization standards.

3. To inform and elaborate existing SOL's and curriculum measures using our expertise, parental and colleague feedback, and appropriate professional organization standards (i.e., NCTM, IRA, etc.)

4. To examine and record our professional development process and products for developing and using alternative assessment in rural early childhood public school settings.

5. To develop a cadre of professionals to serve as resources to their Divisions in the area of alternative assessment.

Blue Ridge Assessment Research Project
Activity Plan
1993-94

Date	Events	Activities & Objectives	Responsible
7/93	Provide alternative assessment course through UVA Continuing Education on Alternative Assessment to be attended, at project expense, by 12 of the 24 participating teachers.	● introduction to alternative assessment research and methodologies ● opportunity to begin designing own alternative assessment strategies	- Susan Mintz - Laurie McCullough - 12 participating teachers - 6 non-reimbursed participating teachers
8/93	Plan and deliver 2-day intensive project planning and team development meeting.	● meet and get acquainted ● team-building activities ● organize design teams ● review AA materials ● discuss current status of CC of L ● review of criteria for assessment design ● examine prototypes ● develop procedures and initial work schedule	- Project Director - Project participants - Steering Committee
9/93	Select external project reviewer.	● quality control ● formative and summative evaluation	- Project Director - Steering Committee
9/30/93	Review of non-tested assessments.	● share drafted assessment measures ● receive feedback and make revisions ● discuss piloting procedures ● discuss other project processes and needs, as required by participants	- Project Director - Steering Committee - Consultants

Date	Events	Activities & Objectives	Responsible
10/93	Prepare, at a team level, for pilot testing of designed instruments.	• to be decided by each team	- Design teams - Project Director
	Conduct project evaluation on professional development and project support activities.	• solicit written feedback • conduct focus groups	- External Consultant
10/26/93 or 11/5/93	Total Group review of own- class-tested instruments with DOE assessment team members	• establish communication with DOE • review developed assessments • receive DOE assessment team member feedback • provide mutual feedback on issues related to assessment design and implementation	- All Project Participants - DOE Assessment Team Members - Steering Committee Members - Project Director
11/93-12/93	Pilot test	• gather student performance data • videotape assessment process, where appropriate • gather student self assessment data (reflection on performance, attitude toward assessment procedure) • gather data on how performance data will be reported to parents • conduct interviews with selected parents re: perceptions of assessment, quality of information	- Design teams - Project Director

Date	Events	Activities & Objectives	Responsible
12/13/93	Pilot-tested instruments due to Diane		- Individual Team members
12/15-22/93	Meet with DOE and other Project Directors	• review assessment designs and pilot process • exchange assessments to be tested in other project sites, as appropriate	- DOE - Project Directors
12/15/93-1/30/94	Phase II assessment design period	• design additional assessments	- Design Teams - Project Director
1/94	Compile and analyze Phase I pilot test procedures.	• conduct follow-up interviews with administering teachers re: effectiveness, quality, content and logistics	- designated design team member(s) - Project Director - Higher Education partners - External consultant
2/1/94	Total Group Meeting for Phase II	• share drafted assessment measures • receive feedback and make revisions • discuss piloting procedures • discuss other project processes and needs, as required by participants • revise pilot test process, based on experience.	- Design Teams - Project Director - Steering Committee - Consultants

Date	Events	Activities & Objectives	Responsible
2/94	Pilot Test	• to be decided by each team	- Design Teams
3/1/94	Total Group Meeting to review tested items	• continue communication with DOE • review developed assessments • receive DOE assessment team member feedback • provide mutual feedback on issues related to assessment design and implementation	- All Project Participants - DOE Assessment Team Members - Steering Committee Members - Project Director
3/94	Pilot test period		- Design Teams
4/15/94	Due date for pilot-tested assessments to Diane		
	DOE/Project Director meeting	• review progress to date • exchange assessments for cross-project pilot-testing	- DOE - Project Directors
		• solicit written feedback • conduct focus groups	- External Consultant
5/94	Conduct project evaluation on professional development and project support activities.	• highlight what has worked. • make recommendations for improvement	- Project Director - Design Teams - Steering Committee
5/25/94	Conduct end of project meeting.	• review pilot testing process and results • review project process and results	- Project Directors - DOE Assessment Representatives
		• review projects process and results	- DOE - Project Directors
6/94	Project Director's meeting	• make recommendations for future	- Project Director
6/15/94	Project report and Professional Development Materials to DOE		
	Project report and Professional Development Materials to DOE		

Date	Events	Activities & Objectives	Responsible
Monthly:	Conduct Steering Committee updates & discussion meetings. Maintain contact with design teams.	• share & receive feedback on assessment tools, scoring rubrics & administration procedures • identify & discuss logistics, roadblocks & stratigies for alternative assessment • build on staff development procedures & materials based upon experience • set short term goals • provide feedback to Project Director	- Design Teams - Project Director - Steering Committee

Blue Ridge Assessment Research Project
Project Timeline
1993-94

September 30, 1993	Review of nontested assessments Total Group, available Steering Committee members, and Consultants
October	Own class pilot test period
October 26 or Nov. 5 or Nov. 4	Total group and DOE review of our classroom-tested assessments
Nov.-Dec.	Pilot test and revision period
Dec. 13 (in mail to Diane)	Revised assessments for delivery to DOE
Week of Dec. 16-22	Project Directors meeting
Dec. 15 - Jan. 30	Development period of Phase II assessments
Feb. 1, 1994	Total group meeting for Phase II review of nontested items
Feb.	Pilot test period
March 1	Total group meeting to review tested items with consultants, available Steering Committee members and DOE
April	Other class pilot test period
April 30 (tentative)	Due date for tested assessments due to Diane for use by other projects
May 1-7 (week of)	Project Directors meeting
May 25, 1994	End of Project meeting
June 1-7 (week of)	Project Directors meeting

June 15, 1994	Project final report and Professional Development materials due to DOE

Assessment Item Checklist

Name______________________________ Intended
Audience____

Reviewer's Name____________________ Title______________________________ Date
Reviewed__________

Content Valid

_____ Relates to one or more objectives, including:
____
____

_____ Allows for students with a wide range of expertise to demonstrate their status on the outcomes.

_____ Reflects assessment techniques appropriate to the outcomes being measured.

_____ Has scoring guidelines or rubrics that appropriately reflect the outcomes that are the focus of the assessment.

Comments:

Instructionally Valid

_____ Makes use of assessments that reflect appropriate classroom practice.

_____ Requires the student to process information actively, rather than to rely solely on recall.

_____ Allows for more than one pathway to a correct answer or for more than one correct answer where appropriate.

_____ Is connected to an appropriate range of student interests or experiences.

Comments:

Reliable

_____ Shows evidence that it can be scored consistently.

_____ Is accompanied by a scoring rubric which provides clearly distinguishable levels of performance where appropriate.

Comments:

Developmentally Appropriate

_____ Is given in a form that is appropriate for the targeted group.

_____ Is reflective of how students learn.

_____ Is administrable within time limits that are appropriate for the students' attention span and ability to sustain involvement.

_____ Specifies the type and degree of assistance given if the item differentiates between what a child can accomplish alone and what a child can accomplish only with assistance so that emerging skills can be identified and fostered.

Comments:

Equitable

_____ Is free of stereotypic or offensive language/attitudes based on factors such as race/ethnicity, socio-economic status, gender, geographic location, and disability.

_____ Is free of irrelevant factors that are likely to interfere with assessing the targeted outcome.

_____ Reflects sufficient flexibility to elicit appropriate responses from all students.

Comments:

Clearly Defined

_____ Is accompanied by clear and complete directions for administration.

_____ Contains clear and complete instructions to the student.

_____ Is accompanied by information so that the student understands the basis on which a judgment will be made.

Comments:

Feasible

_____ Is physically safe for students.

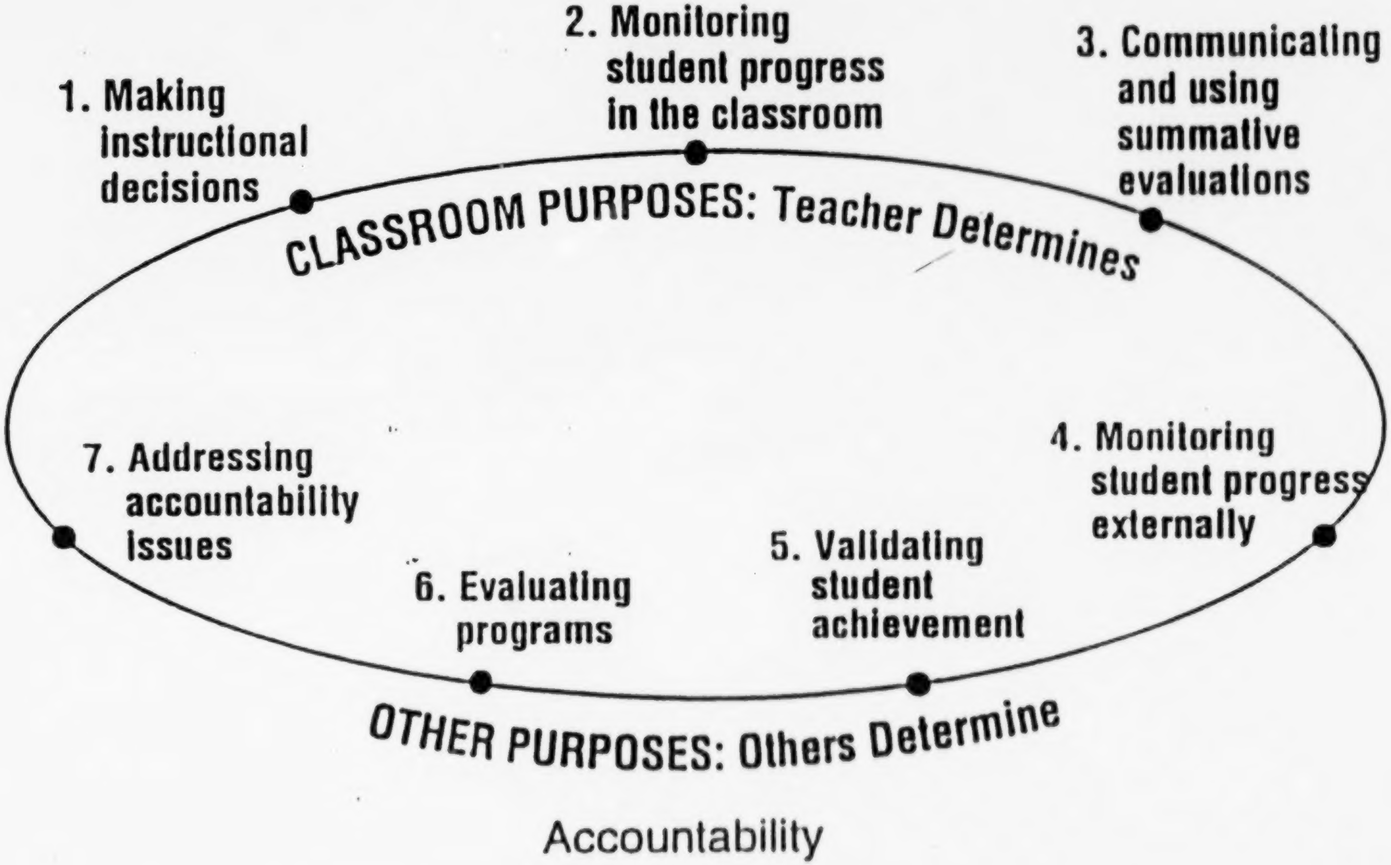
_____ Stays within constraints of reasonable time and monetary costs for the degree of information received.

_____ Is manageable in terms of the administration, scoring, and record keeping.

_____ Requires materials and set-ups that are reasonably accessible.

Comments:

Overall Comments: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OTHER PURPOSES: Others Determine
Accountability

Figure 1: Seven categories of educational purposes

Use of the Assessment Standards for Different Purposes

Assessment Purposes

Purpose 1: **Making Instructional Decisions**

Assessment is the link between teaching and learning. As such it is a dynamic, ongoing and critical process that shapes classroom environments and students opportunities to learn. Through assessment, teachers monitor the success of their practice and make instructional decisions.

Purpose 2: **Monitoring Student Progress**

Assessment as a means of monitoring student progress describes students' development and documents their progress towards specified goals. The primary audience are teachers and students. Monitoring encompasses informal judgments based on classroom observations and interactions, as well as those based on written assignments and formal presentations. It can describe the progress of groups of students as well as individuals. This ongoing process also provides the data for summative evaluations. Students as well as teachers share responsibility for monitoring their progress. When teachers and students collaborate in monitoring progress student learning is enhanced and the teaching-learning process becomes open.

Purpose 3: **Communicating and Using Summative Evaluations**

Periodically, we pause in the learning process to reflect on what we've accomplished. We aggregate data on student learning. What we gather and report communicates what we value. Summative evaluations involve both the aggregation of data about student progress and the communication of that data. Preparing a valid summary is a complex responsibility that requires careful planning, quality judgments of student performance (valid inferences), and the thoughtful synthesis of evidence into a formal description. Formats vary. Including student work enhances the communication of student progress.

Purpose 4: **Monitoring Student Progress Externally**

The monitoring of student progress via externally established performance standards should be wedded to the ongoing instructional assessment in the classroom. This marriage is viewed as an equal partnership, with each supporting the other. Some of that support comes from the incorporation of classroom assessments into the external assessment process. The external performance standards on which students are to be assessed should be established with the help of classroom teachers, who can recognize which tasks are relevant to their classrooms as well as which classroom tasks are relevant to the external evaluation.

Purpose 5: Validating Student Achievement

The purpose of establishing the validity of student achievement is to attest that an individual student has demonstrated a specific level of accomplishment. One might liken this process to earning a merit badge in scouting, or passing the Department of Motor Vehicles driving test. In validating student achievement we, simultaneously place value on a student's past achievement as well as give public expression to our confidence that the student is ready to face the next challenge. student certification should not be based on a single assessment event. However,

Purpose 6: Program Evaluation

A program evaluation must collect information from a variety of sources and in a variety of ways in order to provide meaningful feedback for teachers, students, and those making policy decisions. This process includes activities such as documenting strengths and weaknesses, as well as planned and unplanned outcomes. The intent is to make commendations and/or recommendations concerning the program.

Purpose 7: Accountability

Accountability is a shared responsibility that connects each of the six basic purposes for assessments. Those who are accountable for student achievement includes all stakeholders - students, teachers, administrators, parents and policy makers.

There are criteria for accountability:

- *Levels of Performance*
- *Value Added and accountability based upon gain rather than absolute level of performance*
- *Position in Distributions*[1]

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[1] Adapted from: NCTM: Assessment Standards for School Mathematics. Working draft October 1993

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